World War II US Cavalry Groups

European Theater

GORDON L. ROTTMAN

ILLUSTRATED BY PETER DENNIS

© Osprey Publishing • www.ospreypublishing.com

Elite • 129

World War II US Cavalry Groups

European Theater

GORDON L. ROTTMAN

ILLUSTRATED BY PETER DENNIS

Series editor Martin Windrow

© Osprey Publishing • www.ospreypublishing.com

CONTENTS

INTRODUCTION 4

THE PRE-WAR CAVALRY REGIMENTS 5
Regiments, squadrons, and troops

THE CAVALRY GROUP (MECHANIZED) 7
Organization: Headquarters and Headquarters Troop – Cavalry Reconnaissance Squadrons (Mechanized) – Troops . Cavalry Group armament and vehicles

CAVALRY GROUP MISSIONS 16
Doctrine and practice . Group and squadron tactics . Task-organization for combat

CAVALRY GROUP DEPLOYMENTS 32

THE TEST OF BATTLE 42
Representative examples of cavalry groups in action: 113th Cavalry Group reconnaissance mission – 4th Cavalry Group screening mission – 113th Cavalry Group in the defense – 6th Cavalry Group in the offensive – 2nd Cavalry Group in defense of a river – 2nd Cavalry Reconnaissance Squadron in a river assault – 316th Cavalry Brigade in the offensive – 101st Cavalry Group, miscellaneous missions – 3rd Cavalry Group in the pursuit

CONCLUSIONS 58
Assessments . The post-World War II mechanized cavalry

SELECT BIBLIOGRAPHY 63

INDEX 64

© Osprey Publishing • www.ospreypublishing.com

WORLD WAR II US CAVALRY GROUPS EUROPEAN THEATER

INTRODUCTION

The World War II battlefield accomplishments of the mechanized cavalry groups go largely unreported. These predecessors of the armored cavalry regiments of the late 1940s to early 2000s carried the lineages of pre-war cavalry regiments. Supporting field armies, corps, and divisions, the lightly armed, fast-moving cavalry groups performed not only their primary roles of reconnaissance and security missions, but also both offensive and defensive operations, as well as a variety of unforeseen special missions. Reinforced by other combat units, they often formed the core of special task forces.

When the United States was swept into World War II the horse cavalry was in terminal decline, and the existing cavalry regiments met different fates. Many had already been reorganized as mechanized reconnaissance units. Others retained horses, being known as "horse-mechanized" units, since the

The "horse-mechanized" cavalry regiments traded in some of their horses for motorcycles and scout cars. Instead of bolt-action .30cal M1903 Springfield rifles, the troopers were armed with .45cal M1928A1 Thompson submachine guns; note also this scout's .45cal M1917 revolver (Colt or S&W) – a longtime favorite sidearm of cavalrymen. Harley-Davidson motorcycles were used until replaced by jeeps; they could not negotiate extremely rough ground, mud, sand, or snow, were difficult to handle on ice, and were also noisier than jeeps. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

Most jeeps in combat zones had the canvas top removed to improve observation, and the chance to return fire and bale out rapidly if they came under fire, but some crews risked retaining it for weather protection. Note the canvas cover protecting bedrolls on a rear rack. This is almost certainly a jeep belonging to a headquarters element rather than a scout platoon. (Tom Laemlein, Armor Plate Press)

horses were transported in truck-trailers; these still conducted the traditional cavalry roles of reconnaissance and security. Some of these units were disbanded; others were converted to modern fully-mechanized reconnaissance units; and others still were dismounted, to fight as infantry in the Pacific and Burma.[1] Some were inactivated, and their assets transferred to armored regiments that bore their proud old numbers within armored divisions. While the tank would dominate the European battlefield, there was still a need for traditional cavalry roles; these would now be conducted by new mechanized cavalry, lightly armored but very well armed.

On the eve of America's entry into World War II there were 23 cavalry regiments on active duty, nine of which were National Guard units inducted into Federal service. Of these 23, three were mechanized for reconnaissance, eight horse-mechanized, and 12 still horse-mounted.

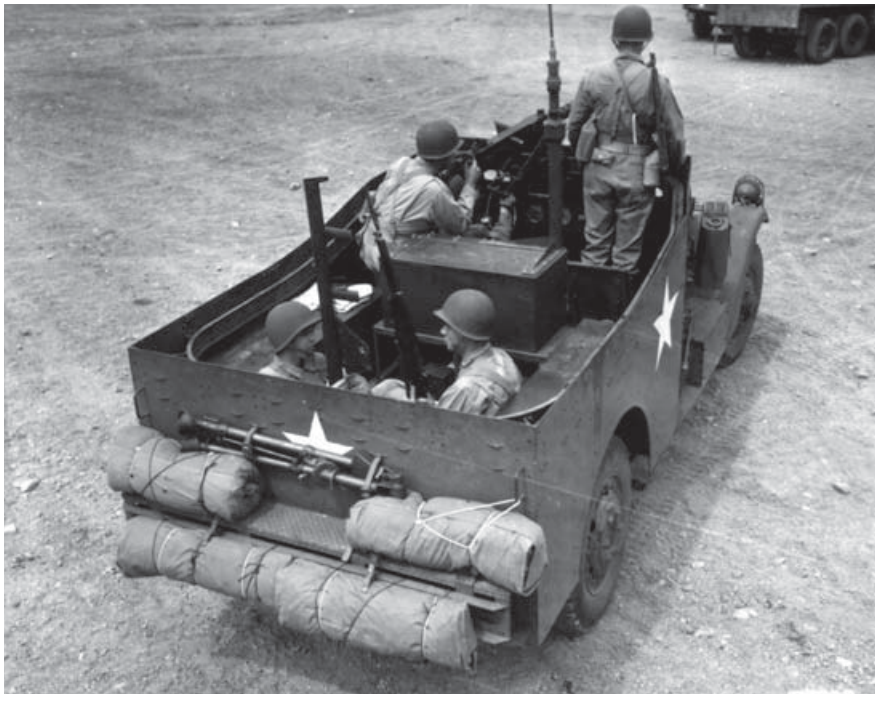
This book's focus is on the 13 cavalry groups that fought in the European Theater. Cavalry groups fought in no other theater; three remained in the States, and two separate squadrons served in Italy and Southern France. The mechanized reconnaissance squadrons and armored reconnaissance battalions organic to armored divisions are not discussed here, nor are the infantry divisions' cavalry reconnaissance troops. (Those units are covered in Osprey Battle Orders 3, *US Armored Divisions,* and Battle Orders 17, *US Army Infantry Divisions*.)

PRE-WAR CAVALRY REGIMENTS

Prior to and early in the war there were 15 horse and mechanized cavalry regiments on active duty. There were three existing mechanized cavalry regiments (1st, 6th & 13th), and five more regiments (2nd, 3rd, 4th, 15th & 16th) were either newly raised or converted to mechanized. Others remained horse or horse-mechanized until converted to mechanized or infantry.

1 See Elite 175, *World War II US Cavalry Units, Pacific Theater*

© Osprey Publishing • www.ospreypublishing.com



The White M3A1 four-wheel scout car, crewed by five men, equipped the mechanized cavalry regiments and part of the horse-mechanized units, and initially the subsequently-organized cavalry groups until M8 armored cars became available. The gunner operates a .50cal M2 machine gun; the two scouts in the back are armed with an M1903A1 Springfield rifle with an M1 grenade-launcher, and a 2.36in M1 bazooka. (Tom Laemlein, Armor Plate Press)

The mechanized regiments were intended as reconnaissance units, and were organized into a headquarters and headquarters troop, service troop, medical detachment, and band, plus two squadrons. A regiment's 1st and 2nd Squadrons each had a headquarters and a headquarters and service troop, and three reconnaissance troops (1st Sqdn, Trps A–C; 2nd Sqdn, Trps D–F). They were equipped with four-wheel White M3A1 scout cars, M2 and M3 halftracks, and jeeps. The horse-mechanized regiments consisted of a 1st Rifle Squadron (Horse) with Trps A–C, and 2nd Reconnaissance Squadron (Mechanized), with Trps D&E (scout cars) and Trp F (motorcycles).

Study of the 1939–41 campaigns in Europe indicated that reconnaissance units would have to be better armed and capable of improved cross-country mobility. The motorcycles were replaced with the new ¼-ton truck or "jeep" in 1942; the White scout cars and most halftracks were replaced with M8 light armored cars in 1943–44.

Regiments, Squadrons and Troops

In European armies, a cavalry "regiment" was generally a battalion-size unit, typically with four to six company-size "squadrons," each made up of several platoon-sized "troops." In US service, by contrast, the regiment, commanded by a full colonel, was of the same echelon as an infantry regiment, although the numbers of battalions/ squadrons and companies/ troops that were actually assigned or authorized to be manned varied over the years.

Full-strength cavalry regiments were typically authorized 10 or 12 companies. The term "troop" was occasionally used to identify companies, but "company" was the more common designation for these subunits of 40 to 100 men commanded by captains. After the Civil War the regiment was standardized with 12 companies, although peacetime regiments might have as few as four. Battalions/ squadrons were not standing units, but temporary groupings of companies. Some regiments during the Civil War formed

© Osprey Publishing • www.ospreypublishing.com

squadrons of two companies – commanded by the senior company commander – and two or three battalions of two squadrons, commanded by majors. Others used the terms "battalion" and "squadron" interchangeably for groupings of two to four companies.

From 1873, only the term "troop" was used in documents, but "company" remained in common parlance; even after 1883, when "troop" was specifically directed, "company" remained in use until around the turn of the century, and some regiments even mixed both terms. Eventually, "troop" and "squadron" were the only terms used for, respectively, company-equivalent and battalion-equivalent cavalry units.

Between 1911 and 1916, US cavalry regiments consolidated their 12 troops into six troops, and eliminated the squadron echelon. This was found to be unsatisfactory, and the old organization was then revived. A regiment had three squadrons each with four troops, plus regimental HQ, supply, and machine-gun troops.With the demise of the horse cavalry and the introduction of the new "group" concept, the regiments chosen for conversion to mechanized cavalry were reorganized as cavalry groups, which remained equivalent to the regimental echelon.

THE CAVALRY GROUP (MECHANIZED)

From regiment on up, each echelon of US Army maneuver units possessed a dedicated reconnaissance unit. Infantry battalions and companies conducted patrols based on rifle platoons and squads, but infantry regiments possessed a 25-man jeep-mounted intelligence and reconnaissance platoon. Infantry divisions were assigned a 143-man mechanized cavalry troop, with light armored cars and jeeps. Armored divisions had a mechanized cavalry reconnaissance squadron, with four reconnaissance troops, an assault gun troop, and a light tank company. The three "heavy" armored divisions – the 1st–3rd Armd Divs – each had an armored reconnaissance battalion, with

The ¼-ton truck – "jeep" or "peep" – replaced the motorcycle as the primary light reconnaissance vehicle in 1942. This one mounts a .30cal M1919A4 Browning machine gun on the M48 "dash" mount ahead of the front passenger seat. The man lying in the foreground is armed with a .45cal M3 "grease gun" SMG, which began to replace the Thompson from winter 1944/45. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

three reconnaissance companies and a light tank company (these three formations employed the battalion and company designations in place of squadron and troop). Airborne divisions did not officially possess a reconnaissance unit, but all formed 61-man provisional reconnaissance platoons. A corps normally had a cavalry group (mechanized) of two cavalry reconnaissance squadrons, as assigned to the "light" armored divisions, but these squadrons had only three reconnaissance troops rather than four.

CAVALRY GROUP ORGANIZATION

Between 1943 and 1944, 16 cavalry regiments of various types were reorganized and redesignated as Cavalry Groups (Mechanized). This placed the cavalry in line with the Army's new "GHQ pool" concept, adopted at the end of 1942. This organizational concept employed the "group" rather than the regiment as a controlling headquarters. In contrast to regiments with their two or three permanently assigned battalions, a group headquarters controlled any number of separate battalions and companies, to include those of different branches attached as needed for a mission. Combat arms adopting the group concept were the cavalry, tank, tank destroyer, field artillery, antiaircraft artillery, and engineers.

The mechanized cavalry regiments' two *assigned* squadrons were detached on paper, redesignated with new numbers, and *attached* to the new mechanized cavalry group. The group retained the number and carried the lineage of the old cavalry regiment. In 12 of the 16 groups, the former regiment's 1st Squadron was assigned the regiment/ group's number, and the 2nd Squadron received an unrelated (usually higher) number in no discernable sequence. With a few exceptions, the squadrons normally stayed with the parent group throughout their service.

The group headquarters and headquarters troop (HHT) and the two attached cavalry reconnaissance squadrons totaled 1,628 men. (It should be understood that cavalry squadrons attached to cavalry groups possessed three reconnaissance troops, while squadrons assigned to armored divisions had four troops plus two additional SP guns in their assault gun troop. There were also additional mechanics.) There were minor strength changes during the war, mainly in support personnel.

The cavalry group possessed only one organic unit, the Group Headquarters and Headquarters Troop, under Table of Organization and Equipment (T/O&E) 2-22. With only 74 personnel, the group HHT was strictly a command and control element, possessing no service or logistical capabilities to support its attached squadrons. The cavalry squadrons were relatively self-contained in regards to service support, and received additional services and supplies directly from corps assets. When other units were attached to the group – as was common – these received their support from corps or divisional assets.

The HHT consisted of the 25-man group HQ, with command, operations, and administrative and supply sections. The group was commanded by a colonel, with a lieutenant colonel executive officer (XO), and possessed a full staff: S-1 (personnel), S-2 (intelligence), S-3 (operations), S-4 (supply), plus staff assistants. The 49-man HQ troop consisted of only the troop HQ (29 men) and the communication platoon (20 men). Its vehicles were 3× M20 armored utility cars, 5× ¼-ton jeeps, 4× ¾-ton weapons carriers, 2× 2½-ton trucks, and 1× 1-ton and 4× ¼-ton trailers. Weapons included 44 M1

© Osprey Publishing • www.ospreypublishing.com

carbines, 9× M1 rifles, 13× submachine guns, 5× pistols, 3× .30cal machine guns, 1× .50cal machine gun, and 3× 2.36in bazookas.

Two 755-man Cavalry Reconnaissance Squadrons (Mechanized), T/O&E 2-25, were attached to the group on a more or less permanent basis. The squadron consisted of a Headquarters and Headquarters and Service Troop (HHST), three Cavalry Reconnaissance Troops, a Light Tank Company, an Assault Gun Troop, and a small Medical Detachment. The squadron was a combined-arms unit, with its three reconnaissance troops providing the maneuver elements, able to operate mounted or dismounted; artillery, in the form of its assault gun troop; and shock power, in its tank company.

Troop HQs ("company," in the case of the tankers) consisted of three sections, of different strengths depending on the troop. The HQ section consisted at a minimum of the CO, XO (not in HHST, assault gun, or tank troops), communication chief, and bugler. The administration, supply, and mess section contained the first sergeant, supply sergeant, mess sergeant, cooks, clerk, and basic privates (spare soldiers). The maintenance section might have a motor officer (who doubled as the XO), motor sergeant, armorer, radio repairman, mechanics, and (if it had one) a tank recovery vehicle crew.

The Squadron Headquarters and Headquarters & Service Troop was split into the squadron HQ (29 men) with HQ, communication, and squadron administration and personnel sections; and the HQ troop (82 men). This comprised the troop HQ – HQ, administration and supply, and maintenance sections; transportation and squadron maintenance platoons; and squadron supply section. Vehicles were 4× M8 armored cars (3× communication section, 1× maintenance platoon), 5× M3A1 halftracks (2× HQ section, 1× communication section, 1× each maintenance section and platoon),

A scout enquires what he should do with a "prisoner"… Most scout jeeps mounted a .30cal M1919A4 MG on an M31 pedestal; some units fitted .50cal M2 guns as here, but this required a reinforced floor. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

Cavalry Reconnaissance Squadron (Mechanized)

T/O&E 2-25, Sept 15, 1943

(Personnel strength figurers are:
officers – warrant officers – enlisted men.)

14–3–736 (16–3–748, with medical detachment)

HQ and HQ & Service Troop, T/O&E 2-26	12–3–123
Squadron HQ	9–1–46
HQ Section	8–0–13
Communication Section	1–0–28
Sqdn Admin & Personnel Section	0–1–5
HQ Troop	3–2–77
Troop HQ	2–0–29
HQ Section	1–0–2
Admin, Mess, & Supply Section	0–0–21
Maintenance Section	1–0–6
Transportation Platoon	1–0–12
Squadron Maintenance Platoon	0–1–29
Squadron Supply Section	0–1–7
Reconnaissance Troop (×3), T/O&E 2-27	5–0–140
Troop HQ	2–0–56
HQ Section	2–0–13
Admin, Mess, & Supply Section	0–0–31
Maintenance Section	0–0–12
Reconnaissance Platoon (×3)	1–0–28
Armored Car Section	1–0–11
Scout Section (with ×3 squads)	0–0–17
Assault Gun Troop, T/O&E 2-28	4–0–89
Troop HQ	1–0–29
HQ Section	1–0–4
Admin, Mess, & Supply Section	0–0–18
Maintenance Section	0–0–7
Assault Gun Platoon (×3)	1–0–20
Platoon HQ	1–0–6
Gun Section (×2)	0–0–5
Ammunition Section	0–0–4
Light Tank Company, T/O&E 17-17	4–0–94
Company HQ	1–0–29
HQ Section	1–0–10
Admin, Mess, & Supply Section	0–0–13
Maintenance Section	0–0–9
Tank Platoon (×3)	1–0–19
Medical Detachment, T/O&E 2-25	2–0–12

1× M32 tank recovery vehicle, 10× ¼-ton jeeps, 13× 2½-ton trucks, 1× 4-ton Diamond T wrecker, and 10× ¼-ton, 12× 1-ton, and 2× ammunition trailers. Weapons were 105× M1 carbines, 30× SMGs, 3× pistols, 9× .30cal MGs, 7× .50cal MGs, 1× bazooka, and 1× 81mm mortar (on tank recovery vehicle).

The three 145-man Cavalry Reconnaissance Troops (Mechanized) – designated Trps A–C – had a 56-man troop HQ composed of HQ, administration, supply & mess, and maintenance sections. Vehicles included 3× M8 armored cars (2× HQ section, 1× maintenance section), 4× M3A1 halftracks (3× administrative and supply & mess sections, 1× maintenance section), 5× ¼-ton jeeps, 1× 2½-ton cargo truck, and five each ¼-ton and 1-ton trailers. (This was the same T/O&E as the infantry division's cavalry reconnaissance troop.)

The troop's three 29-man reconnaissance platoons were each organized into an armored car section and a scout section. The armored car section had 3× M8s; one was commanded by the platoon leader, another by the platoon sergeant, and the third by an armored car commander. The rest of the crew included a radio operator/ gunner, driver, and radio operator/ assistant driver; the commander doubled as the main gun loader. The scout section had three squads, each with two jeeps with trailers (which were typically left behind). Of the section's six jeeps, three mounted .30cal MGs and three (officially) carried 60mm mortars. Sometimes machine guns were mounted on all jeeps, using either pedestal or dashboard mounts; some units mounted .50cals, but the mount damaged the floor pan unless reinforcing plates and angle braces were fitted. Total troop armament was 91× M1 carbines, 26× M1 rifles, 28× SMGs, 13× .30cal MGs, 3× .50cal MGs, 9× 60mm mortars, and 4× bazookas. The latter were assigned to the troop HQ, but could be loaned out to reconnaissance platoons. (For a listing of the platoon personnel, see commentary to Plate B.)

The 116-man Assault Gun Troop (Trp E – the squadron had no Trp D) had a troop HQ organized the same as the reconnaissance troop's, but with only

Reconnaissance troops had nine 60mm M2 mortars, three per platoon, although they often did not carry that many. They were used mainly for "reconnaissance by fire," and when in the defense. Note that these cavalrymen wear tankers' uniforms, though with M1 steel helmets. (US Army)

© Osprey Publishing • www.ospreypublishing.com

The Ford-built M8 armored car replaced the White scout car in the mechanized cavalry units in 1943–44. This early-production M8 is fitted with the .50cal MG fixed at the rear of the turret rather than on the later and more practical 360º ring mount. Early production vehicles are also identifiable by an accessory box mounted on the front glacis plate, but these were later removed, since they were easily damaged or even knocked off by vegetation. Between the front and rear wheels the rack for antitank mines is fitted with a protective cover; these too proved vulnerable and were usually removed. (Tom Laemlein, Armor Plate Press)

30 men. The HQ possessed 2× M3A1 halftracks (1× HQ section, 1× maintenance section), 1× M32 tank recovery vehicle, 2× ¼-ton jeeps, 1× 2½-ton cargo truck, and 1× 1-ton trailer. The three 21-man assault gun platoons had two gun sections, each with one 75mm M8 self-propelled howitzer motor carriage (HMC) crewed by a sergeant crew chief, corporal gunner, technician 4 driver, pfc/ pvt cannoneer, and pfc/ pvt machine gunner. Each gun towed an ammunition trailer, though this was usually left in the troop train. The platoon HQ had seven men, including four riflemen to escort the assault guns and perform general duty, plus an M3A1 halftrack. The platoon's four-man ammunition section also had a halftrack and an ammunition trailer. The troop's weapons were 78× M1 carbines, 16× M1 rifles, 22× SMGs, 6× .30cal MGs, 7× .50cal MGs, 9× bazookas, and 1× 81mm mortar (on tank recovery vehicle).

The 94-man Light Tank Company (Co F) had a 34-man company HQ organized the same as the assault gun troop's, though with its size increased by mechanics and HQ tank crews. The HQ had 2× M5A1 light tanks (HQ section), 1× M3A1 halftrack (maintenance section), 1× M32 tank recovery vehicle, 2× ¼-ton jeeps, 1× 2½-ton cargo truck, and 1× ¼-ton and 2× 1-ton trailers. The three tank platoons each had five M5A1 tanks crewed by four men: commander, gunner, driver, radio operator/ machine gunner. Company weapons included:

The M8 light armored car was the mainstay of the cavalry reconnaissance troop, with nine per troop, and three per platoon along with six jeeps. Each M8 carried a 20ft long, 5/8in diameter tow cable – which saw a good deal of use, given the M8's disappointing cross-country performance. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

The M3 tripod for the (unseen) .50cal MG has been stowed on the left front of this armored car. Typically, the crew's musette bags are also stowed outside the cramped confines of the vehicle. Vehicle crews were issued musette bags rather than bulkier backpacks like the M1928 haversack. Most M8 armored car crewmen wore standard M1 steel helmets, as they so often had to operate dismounted, but note that the driver in the left front wears the M1938 tanker's helmet with its integral headphones. (Tom Laemlein, Armor Plate Press)

24× M1 carbines, 70× SMGs (three per tank), 2× .50cal MGs, 2× bazookas, and 1× 81mm mortar on the recovery vehicle. (This was the same T/O&E as the light tank company organic to medium tank battalions.)

Some cavalry reconnaissance squadrons in the early days possessed only two reconnaissance troops (Trps A and B) and a Light Tank/ Artillery Support Troop (Trp F), the latter with two M3A1/ M5 tank platoons and an "artillery" platoon with 75mm M1897A4 antitank guns mounted on M3 halftracks.

The 14-man squadron Medical Detachment operated as part of the HHST. It was under a captain or first lieutenant and operated an aid station; no medics were available for attachment to the squadron's troops. The detachment had 4× ¼-ton jeeps, 1× ¾-ton weapons carrier, and 1× ¾-ton ambulance. Prior to July 1943 the detachment had 3× M3A1 halftrack ambulances, but they were deleted along with their drivers.

Squadron and troop headquarters elements were equipped with a number of halftracks. This M3A1 has the driver's compartment well protected from the elements by an arrangement of canvas tarps, positioned to still allow the .50cal MG to traverse fully. Mounted in the rear are both a .30cal M1917A1 water-cooled MG (near side) and an air-cooled M1919A4. The M1A1 antitank mines in the side rack are still in their protective wrappings. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

CAVALRY GROUP ARMAMENT

Mechanized cavalry units possessed no special weapons, being armed with standard small arms, light crew-served weapons, and light AFVs. This allowed them to move fast, and the unit massed a considerable amount of short-range firepower, with a predominance of automatic weapons and 37mm guns as well as light mortars and artillery. These were mainly intended for self-defense and reconnaissance by fire.

The Garand .30cal M1 rifle was a semi-automatic with an eight-round magazine. The .30cal M1 semi-automatic carbine had a 15-round magazine, and used a shorter cartridge than the M1 rifle and machine guns. Carbines by far outnumbered M1 rifles in the squadron T/O&E – 465 to 90; this proved a deficiency when engaged in dismounted combat. There were 205× .45cal M1928A1, M1 or M1A1 Thompson submachine guns, later supplemented by M3 "grease guns" from mid-1944; all used 30-round magazines. The SMGs were mostly carried by AFV crewmen, but also by many support personnel. Hand grenades included the Mk II and Mk IIA1 "pineapple" fragmentation, Mk IIIA1 "concussion," AN-M8 white smoke, AN-M14 thermite incendiary, M15 white phosphorus, and M16 and M18 colored smoke.

A 200-round M2 ammunition chest is fitted to a .50cal machine gun. These "tombstone" ammo cans were seldom seen on halftrack-mounted guns; at 89lb they were extremely heavy, and slow to replace. In the lower right can be seen the barrel of a stowed 2.36in M9 bazooka. (Tom Laemlein, Armor Plate Press)

There were 54 Browning .30cal M1919A4 air-cooled light machine guns arming the many AFVs and reconnaissance jeeps. The 25 Browning .50cal M2 machine guns were mounted on AFVs; intended for antiaircraft use, they could also be used against ground targets, and were excellent for suppressive fire and reconnaissance by fire owing to their ability to penetrate typical cover. While the guns were mounted on AFVs, tripods were also provided for ground-firing. It was not uncommon for additional machine guns to be mounted on jeeps and halftracks.

Squadrons were armed with 31× 2.36in M1A1 bazookas, a lightweight, man-portable AT weapon with a 250-yard range. The 2.36in M9 which

Troop E of a cavalry reconnaissance squadron had 6× 75mm M8 Howitzer Motor Carriages. While called an "assault gun," its open top, light armor, and lack of coaxial and bow machine guns rendered it incapable of the close-support missions of a true assault gun. This HMC, speeding down a road past a knocked-out PzKw V Panther tank, is fitted with a locally fabricated hedgerow-busting plow on the bow, as invented by Sgt Curtis G. Culin III of the 102nd Cav Recon Sqdn to deal with the natural obstacles of the Normandy *bocage* country. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

M2 halftrack "combat cars" were issued in lieu of M3 halftracks to some units; this was a version with the troop compartment 10in shorter than the M3, and ammunition stowage bins with external access at the front of the compartment. This M2, being greeted by cheering French townspeople, has a retrofitted storage rack on the rear filled with bedrolls and camouflage net. The racks on the side for AT mines are filled instead with .30cal MG ammunition cans. (Tom Laemlein, Armor Plate Press)

began to appear in late 1944 had a 300-yard range and was capable of being broken down into two sections, making it easier to carry in vehicles.

Each reconnaissance platoon had three 60mm M2 mortars with a 1,985-yard range. Besides HE, from late 1944 WP and illumination rounds were also available. While carried in a jeep, the 60mm was fired dismounted. The troop's nine mortars were useful for reconnaissance by fire, but were issued in greater numbers than was necessary. There was no arrangement for centralized fire control, so mortars were seldom massed on targets.

Vehicles

The M8 light armored car was built on the six-wheel 2½-ton truck chassis. (To the British it was known as the Greyhound, but Americans seldom if ever used this name.) The M8 offered poor cross-country mobility, and its armor was too light.[2] The turret mounted a 37mm M6 gun (with 80 rounds – but only 16 if two radios were fitted), a coaxial .30cal M1919A4 MG, and a .50cal M2 MG intended for AA use. The range of the 37mm was rather less than 1,000 yards under combat conditions. Its ammunition included armor-piercing, high explosive, and canister; but the AP was almost useless against any but the lightest AFVs, and the HE rounds were weak against field fortifications and exposed troops. (The M8 replaced the White M3A1 four-wheel, open-topped scout car; some units initially received M3 halftracks as substitutes, but these were replaced with M8s before seeing action.)

The group HHT possessed three M20 armored utility cars, which were M8s without a turret and with a ring-mounted .50cal MG above an open-topped compartment. (Designated the M10 when standardized in April

2 See Osprey New Vanguard 53, *M8 Greyhound Light Armored Car 1941–91*. The thickest armor, on the lower front plate and around the turret, was only ¾-inch (19mm).

© Osprey Publishing • www.ospreypublishing.com

1943, it was changed to M20 to prevent confusion with the M10 tank destroyer, since both were used by the Tank Destroyer Command.)

The tank company was equipped with 17× M5 or M5A1 Stuart light tanks, most units having the latter by 1944. Armament was a 37mm M6 gun (M5 – 123 rounds; M5A1 – 147 rounds), a coaxial .30cal M1919A5 MG, one M1919A4 in the bow and a second mounted atop the turret. The Stuart's light armor and armament restricted it to reconnaissance and escort duties. While dangerously obsolete for armor-vs-armor combat, it still had its uses: it could traverse muddy fields in which M4 Shermans would bog down, or thread its way through trees and broken ground. Its two V8 gasoline engines were also much quieter than the Sherman's aircraft engines, making it better suited for reconnaissance.[3]

The M5A1 Stuart tank was armed with a 37mm main gun, a coaxial .30cal M1919A5 machine gun, one .30cal M1919A4 in the bow, and a second atop the turret. While obsolete for tank-vs-tank combat, the M5A1 had many uses in the reconnaissance role; it was agile, and its small size compared to the M4 Sherman made it more maneuverable in the tight confines of urban areas or woodland. Note the shipping data still stenciled here on the forward side below the assistant driver's hatch. (Tom Laemlein, Armor Plate Press)

The Stuart was replaced in many units by the M24 Chaffee light tank when this began to be issued to cavalry groups in January 1945, and most groups had the M24 by April. It had a 75mm M6 gun (48 rounds – AP, HE, WP, smoke) along with two .30cals, a .50cal, and an internally mounted 2in M3 smoke mortar. The 75mm gun offered improved capabilities, but was still inadequate against heavy armor. The Chaffee's armor overall was thinner than the Stuart's, but compensated for this by being much better sloped.[4]

The 75mm M8 howitzer motor carriage, with a five-man crew, was based on the M5 light tank chassis. With an open-topped turret and very light armor, it was not intended for direct-fire close assault. Its turret-mounted M3 howitzer had a 9,600-yard range, and it carried 46 rounds of HE, HEAT, WP, and smoke. The M8 HMC also mounted a .50cal MG aft on a turret-top ring. Each HMC was provided with an armored ammunition trailer, either an M8 (limited standard) or M10 (standard from 1944), carrying 93 or 117 rounds respectively.

The M3 and M3A1 halftrack personnel carriers were mainly assigned to headquarters support elements – e.g., maintenance sections, thus allowing mechanics to be delivered to exposed damaged vehicles, and to tow the lighter ones. They normally had a .50cal MG and occasionally one or two .30cals. The thinly armored open-top passenger compartment could carry up to 13 men.[5]

The M32 tank recovery vehicle (listed on some T/O&Es as T5) was an M4 tank chassis with an A-frame boom and a 60,000lb-capacity winch. It had an 81mm M1 mortar (30 rounds WP) on the bow for delivering

3 See Osprey New Vanguard 33, *M3 & M5 Stuart Light Tank 1940–45*
4 See NVG 77, *M24 Chaffee Light Tank 1943–85*
5 See NVG 11, *M3 Infantry Half-Track 1940–73*

© Osprey Publishing • www.ospreypublishing.com

The cavalry reconnaissance squadron's light tank company (Co F) was equipped with 17× M5A1 light tanks – five in each of the three platoons, and two in the company headquarters. The company also had an M3A1 halftrack in the maintenance section. Note, on the jeep in the foreground, a protective stanchion made from angle iron and welded to the front bumper to ward off dangling wires. (Tom Laemlein, Armor Plate Press)

screening smoke, plus .30cal and .50cal machine guns. The four-man M32 was deleted from the T/O&E in October 1943, but returned in July 1944, probably without units ever having turned them in.

In all the squadron possessed 40× M8 armored cars, 17× M5A1 or M24 light tanks, 26× M3A1 halftracks, 6× 75mm M8 self-propelled howitzers, and 3× M32 tank recovery vehicles, plus 84 jeeps and 19 trucks.

CAVALRY GROUP MISSIONS

Cavalry groups were normally assigned to numbered field armies and then attached to corps. The corps attachment often remained habitual, but groups were shifted between corps on occasion. The groups, or elements of them, could be attached to divisions for specific missions, but remained under corps control.

To quote 1943 doctrine: "Mechanized cavalry units are organized, equipped, and trained to perform reconnaissance missions employing infiltration tactics, fire, and maneuver. They engage in combat only to the extent necessary to accomplish the assigned missions." The cavalry also conducted security missions. The groups were considered economy-of-force units, with their strength, equipment, and organization reduced to the minimum requirements necessary to accomplish these missions.

In the offense

The cavalry group would reconnoiter the planned routes of advance, either road or cross-country. The cavalry group had only two squadrons because it was envisioned that each would reconnoiter routes for one of the corps' two lead divisions. Multiple routes might be reconnoitered to determine which were the

© Osprey Publishing • www.ospreypublishing.com

best suited and which to reject. The criteria by which routes were assessed included road surfaces and bridges, the need for repairs, possible by-passes for destroyed bridges, unit assembly areas, probable ambush sites, etc. The cavalry might be tasked to reconnoiter specific features and report on them in detail. Any signs of enemy activity would be reported, and if enemy positions were encountered they would be plotted.

The reconnaissance unit might be able to secure key terrain features such as bridges, crossroads, villages, etc, if enemy resistance was light or negligible, but their light armament was barely adequate for self-defense and reconnaissance by fire. When the main forces engaged the enemy, reconnaissance units would withdraw, and might be employed to reconnoiter routes to bypass or outflank the enemy. Owing to their short-range firepower, (albeit limited) armor protection, and maneuverability, cavalry groups could conduct reconnaissance-in-force missions. These were more aggressive in nature compared to more passive reconnaissance missions: essentially, the cavalry challenged the enemy to counterattack them in order to determine his strength and capability. They might also seize terrain in key areas against light resistance and hold it until the follow-on forces arrived.

Cavalry units often served as guides, directing other units forward and providing up-to-date firsthand information on road and bridge conditions, mined areas, manmade and natural obstacles, and enemy activity. (Tom Laemlein, Armor Plate Press)

If the enemy was withdrawing, disorganized or routed, a pursuit would be mounted, with friendly forces pressing forward to engage the enemy while he was vulnerable. In such cases the enemy would frequently outdistance the pursuers. Reconnaissance units would attempt to maintain contact with the enemy to determine his intended withdrawal routes, and whether he was

A machine gun-armed scout jeep observes an apparently peaceful German village. They will not be lured into carelessness by its benign appearance or apparent lack of enemy presence. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

establishing new defensive lines. Small rearguard forces attempting to delay the pursuit would be bypassed.

The security mission

This was of three types. *Screening missions* were intended to counter enemy reconnaissance and warn friendly forces of their presence; the cavalry would repel or destroy enemy patrols, and warn of the enemy's main-force approach. *Guard missions* were conducted by placing small cavalry units on favorable terrain a good distance from advancing or defending friendly forces, to provide early warning and buy reaction time in the event the enemy attempted to attack the main body. *Covering missions* were similar to guard missions, but conducted even further afield, with cavalry units remaining more mobile to harass the advancing enemy. The aim was to allow the main force to maneuver to counter enemy movements.

* * *

The above were the cavalry group's missions according to doctrine, and they remained important, but actual practice saw the groups employed in many other roles. In some ways the cavalry was underemployed, and since warfare in Northwest Europe was much more mobile, fought on wider fronts, and more dispersed than had been envisioned, the cavalry's mobility and speed were put to good use, although they were not always ideally equipped and organized for some missions. There was no realistic frontage specified for corps and divisions; this varied greatly depending on terrain, road systems, mission, forces available, enemy capabilities, and even

A

THE MECHANIZED CAVALRYMAN'S MOUNTS

M8 armored car and machine-gun jeep, Troop C, 24th Cavalry Reconnaissance Squadron, 4th Cavalry Group (Mechanized); Belgium, September 1944

The cavalry reconnaissance troop's three reconnaissance platoons were each equipped with three M8 light armored cars, and six jeeps (¼-ton trucks).

The 17,400lb M8 used a 6×6 chassis and was powered by a Hercules JXD in-line 6-cylinder gasoline engine; it had a top road speed of 56mph, and could ford 24in of water. Development began as the T22E2 by Ford Motors in mid-1941, and it was envisioned as a fast tank destroyer to replace the inadequate weapons carrier-mounted 37mm AT gun. By the time it was adopted in April 1942 it was ill-suited for its original role. Adopted as the M8, it was needed immediately, with little time available to correct deficiencies, but series production did not begin until March 1943.

All armament was in the two-man turret, with a 37mm M6 gun and a .30cal M1919A4 machine gun fitted in the M23A1 combination mount, and a .50cal M2 AA machine gun. Originally the .50cal was mounted on the rear of the open-topped turret, thus preventing simultaneous forward firing by all three weapons. Consequently a 360º M49C ring mount was fitted on new production cars from January 1944, and authorized for retrofitting; a similar M50 mount was authorized in August 1944. Ammunition stowage was 80 rounds 37mm (16 rounds if fitted with two radios; some units provided additional ammunition storage), 400 rounds .50cal, 1,500 rounds .30cal, plus 400 rounds .30cal carbine, 12 hand grenades, four M1 smoke pots, and six M1A1 antitank mines in side racks. M8 production ceased in June 1945, by which time 8,523 had been built.

While the ¼-ton 4×4 truck (no model number) was popularly known as the "jeep," many units referred to it as the "peep." Developed and produced by Willys-Overland Motors as the MB, it was also built by Ford as the GPW. The jeep could carry a driver and three passengers. Three of the platoon's jeeps were armed with a .30cal M1919A4 MG on an M31 pedestal mount; some units mounted a .50cal M2 instead, which required reinforcement of the floor pan. Other units substituted an M48 "dash" mount in front of the right passenger seat, and in some instances both pedestal and dash guns were fitted – as shown here. Three jeeps carried 60mm M2 mortars, although some units only used one mortar, and might or might not add MG mounts on these. In theater, jeeps often had expedient wire-breaker stanchions welded to the front bumper to guard against telephone and power lines dangling across the road.

All six jeeps were provided with ¼-ton two-wheel amphibian cargo trailers for personal gear, rations, and ammunition. "Amphibian" means the loaded trailer floated when towed through water; the jeep could ford 18 inches. Trailers were usually left in the troop rear area, except perhaps one for mortar ammunition.

© Osprey Publishing • www.ospreypublishing.com

© Osprey Publishing • www.ospreypublishing.com

An M8 armored car and an M3A1 halftrack conduct "reconnaissance by fire" of a suspected enemy position. The mine rack on the M8 appears to carry M1 smoke pots, and the turret-top .50cal has the seldom-seen 50-round ammunition box rather than the more common 100-round can. (Tom Laemlein, Armor Plate Press)

weather. A post-war assessment described the most common cavalry missions as follows:

- Offensive combat, including attack as well as pursuit and exploitation.
- Defensive combat, including defense, delaying actions, and holding of key terrain until arrival of the main force.
- Reconnaissance, including point, area, and route.
- Security for other arms, including blocking, mobile and stationary screening, protecting exposed flanks, maintaining contact between larger units, and filling (securing or patrolling) gaps.
- Special operations, included acting as a mobile reserve, providing for security and control of rear areas and headquarters, and operating an army information service.

The "information service" mission saw the group employed in a liaison role, monitoring the movements of friendly units, reporting their actual forward locations, status, and activity – "ground truth." The Third Army's 6th Cav Grp (Mech), nicknamed "Patton's Household Cavalry," was employed in this manner. In fast-moving offensive operations it was not uncommon for wide gaps to develop between divisions, especially since the thrusts were oriented on roads rather than formations covering broad fronts across the countryside. Cavalry units would maintain contact between the widespread divisions, mop up scattered enemy, and be on the lookout for infiltration.

The types of missions actually performed by the mechanized cavalry overall were judged to have been in the following order of frequency: defensive combat 33 percent, special operations 29 percent, security 25 percent, offensive combat 10 percent, and reconnaissance 3 percent. The actual percentages experienced by individual groups naturally varied greatly and changed over time. The most striking points revealed here are that pure reconnaissance, supposedly the primary cavalry mission, was extremely rare, and that defensive missions were common. The ratio of days of primarily dismounted employment to primarily mounted was approximately 1.8 to 1. The performance of offensive, defensive, and security missions frequently saw the cavalry group reinforced by tank destroyer and artillery battalions, and at least by an engineer company.

© Osprey Publishing • www.ospreypublishing.com

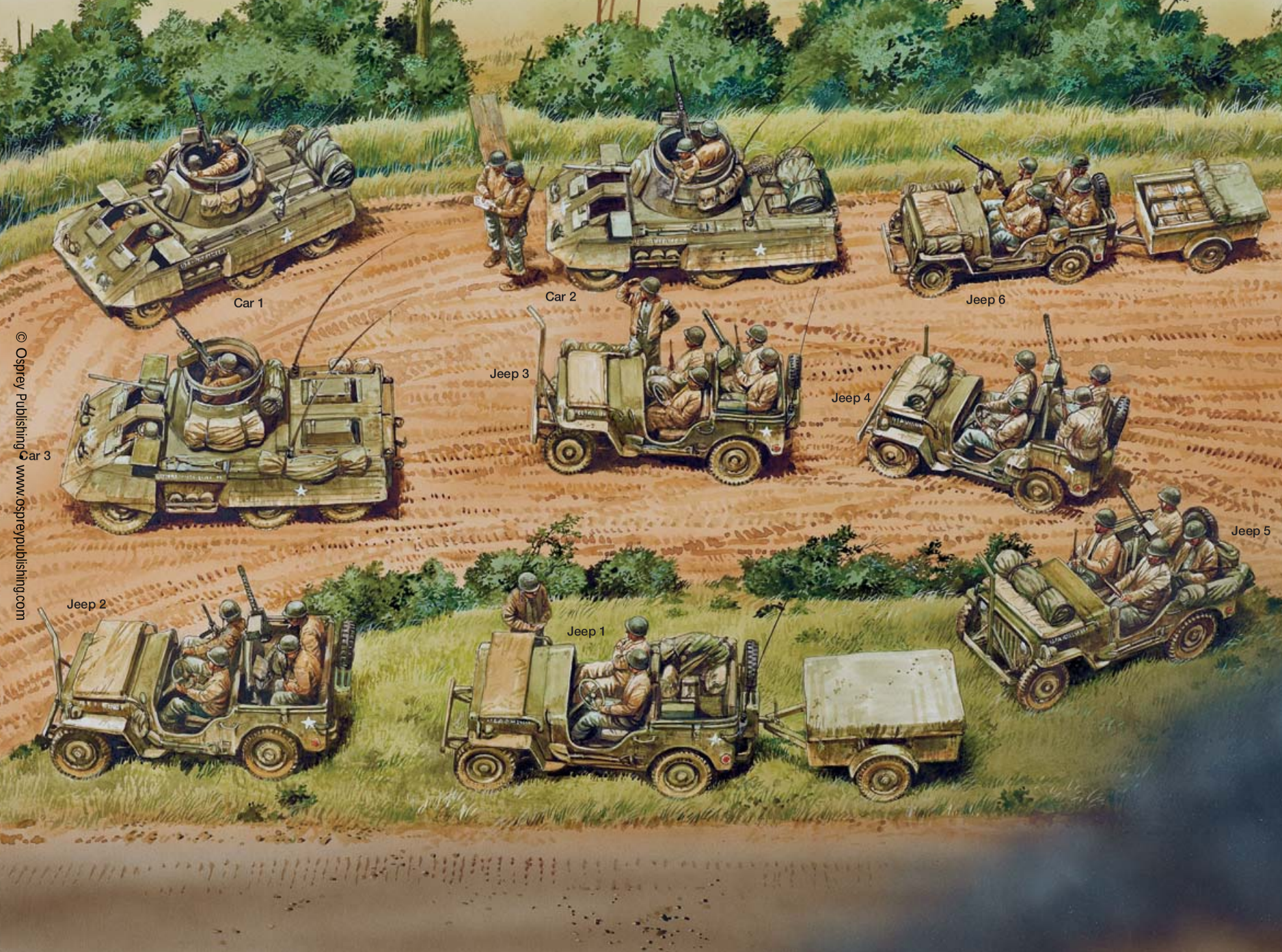
Scouts check out an apparently undefended village. This jeep's pedestal-mounted M1919A4 is fitted to a cradle usually used for a .50cal gun. Note the M1932 musette bags slung on the jeep's rear, and the eight-round M1 rifle clip fastened to the trooper's jacket pocket. (Tom Laemlein, Armor Plate Press)

A problem experienced when employing reconnaissance units for offensive missions was indicated by the doctrinal statement, "They engage in combat only to the extent necessary to accomplish the assigned missions." During their pre-combat training cavalry units took that to heart, and focused on reconnaissance and security missions. They were taught to avoid contact, to avoid even being detected, and above all, to avoid being decisively engaged. In practice, units had to learn to be more aggressive while actually on the job.

The accompanying panel compares the weaponry of the cavalry reconnaissance squadron to that of the infantry battalion. This is important when considering the ability of the cavalry squadron to gain and hold ground. While the cavalry's gun and MG firepower was impressive, securing

Troopers of the 117th Cav Recon Sqdn, an independent unit with Seventh Army, nail up a sign welcoming following troops to Germany. The German sign they have removed reads: "To Petersbächel – only for cross-country vehicles." (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com



© Osprey Publishing www.ospreypublishing.com

and holding ground still required significant numbers of riflemen. The infantry battalion had them; but the cavalry's carbines and submachine guns were too short-ranged and light on penetration to be fully effective combat weapons except at close ranges.

On the other hand, the cavalry squadron was 100 percent mobile, with organic transport: 96 assorted AFVs, 84 jeeps, and 19 trucks. The infantry battalion possessed only 22 jeeps and 20 trucks, which were mainly for crew-served weapons, mess gear, supplies, and ammunition. Only a small percentage of infantry personnel rode, and it required 20–30 attached 2½-ton trucks to transport an infantry battalion.

Cavalry and infantry unit firepower comparison, 1945

Weapon	*Cav Sqdn*	*Inf Bn*
75mm M24 tank gun*	17	0
75mm M8 SP howitzer	6	0
57mm M1 AT gun	0	3
37mm M8 armd car gun	37	0
81mm M1 mortar	0†	6
60mm M2 mortar	27	9
2.36in M9 bazooka	31	29
.50cal M2 MG	25	6
.30cal M1919A4 MG	122	22
.30cal M1918A2 BAR	0	45
.30cal M1 rifle	126	624
.30cal M1 carbine	394	249
.45cal M1/M3 SMG	205	18
Personnel strength	755	825

* 37mm guns, if still equipped with M5A1 tanks.
† Cavalry squadron's 3× 81mm mortars on tank recovery vehicles not counted – for screening smoke only.

B THE RECONNAISSANCE PLATOON

The three 29-man reconnaissance platoons of the cavalry reconnaissance troop did not have a platoon HQ as such. The platoon commander and platoon sergeant were assigned to the armored car section; however, either could travel in whatever vehicle, including jeeps, and with whichever element the situation required. When operating as a platoon, the platoon sergeant brought up the rear. The armored car section had three M8s and the scout section was divided into three two-jeep squads, but the platoon seldom operated as organized. It would typically task-organize into two or three reconnaissance teams with a varied mix of vehicles, depending on the mission, terrain, extent of area or routes to be reconnoitered, and expected opposition. If it was organized into three teams, these would be led by the platoon commander, platoon sergeant, and scout section leader. The section and squad leaders' jeeps mounted an SCR-510 FM radio, and each armored car mounted an SCR-506 AM and an SCR-508 FM radio. The T/O&E organization from which the platoon was task-organized was as follows:

Armored Car Section		12 men
Platoon commander*	2nd lieutenant	M1 carbine
Platoon sergeant*	staff sergeant	M1 carbine
Armored car commander	sergeant	M1 carbine
Armored car driver (×3)	tech 5	M1 carbine
Radio operator & asst driver (×3)	tech 4/5	M1 carbine
Radio operator & gunner (×3)	tech 5/ pfc/ pvt	M1 carbine

3× M8 light armored cars (37mm gun, .30cal & .50cal machine gun)
(* = Also armored car commander)

Scout Section		17 men
Section leader (also squad leader)	sergeant	M1 rifle
Squad leader (×2)	corporal	M1 rifle
Light truck driver (×6)	tech 5/ pfc/ pvt	M1/M3 submachine gun
Mortar gunner (×6)	pfc/ pvt	M1 carbine
Rifleman & radio operator (×2)	pfc/ pvt	M1 rifle

6× ¼-ton jeeps with ¼-ton trailers (3× .30cal MG, 3× 60mm mortar)

The (unusually) full-strength platoon pictured here are mounting out in an assembly area to split into three teams. Each team's vehicles are lined up in a column:

(Background): Armored cars 1 and 2, accompanied by jeep 6 (with 60mm mortar and trailer), and led by the platoon sergeant; this team will provide fire support.

(Center): Armored car 3 and jeeps 3 and 4, led by the platoon commander; this team will reconnoiter a primary route.

(Foreground): The scout section leader in jeep 1 (with trailer), accompanied by jeeps 2 and 5; this team will reconnoiter a secondary route.

© Osprey Publishing • www.ospreypublishing.com

Besides reporting mined and booby-trapped areas, cavalrymen marked dangerous sites as a warning to follow-on troops. Here an M20 armored utility car of a group headquarters troop passes a booby-trapped automobile, apparently during the Ardennes campaign. (Tom Laemlein, Armor Plate Press)

Cavalry group and squadron tactics

The byword of the infantry and armor was "fire and maneuver," by which means they were to close with and destroy or capture the enemy. The tank destroyers' motto was "seek, strike, destroy;" in order to accomplish this effectively, they had to know where the enemy was or from where he was coming. While it was not an official motto, the cavalry's could have been "move and observe."

A great deal of emphasis in training was placed on avoiding contact, and not becoming decisively engaged. The purpose of reconnaissance units was to observe and report; if they were bogged down and slugging it out with enemy outposts or rearguards, they were wasting time and failing to accomplish their mission. They were the eyes and ears of the main force; if at all possible, they were to report and bypass any light resistance, and locate the main enemy force or defenses.

To conduct a reconnaissance mission, under ideal circumstances the unit was briefed on:

- Friendly forces situation (where, intent, objective)
- Enemy situation (suspected locations, recent activity, what it was thought they were doing)
- Mission of the higher echelon that the unit was supporting
- Zone or route on which it was to operate
- Adjacent friendly elements (including reconnaissance) and their movement direction
- Planned contact location with other friendly elements
- Mission duration (for logistical planning)

This last was important, as the reconnaissance unit had to carry sufficient fuel, ammunition, and rations to sustain itself for the mission's duration – it could not count on timely resupply.

When multiple patrols were sent into an area, each had to know the others' planned routes and reconnaissance zones in order to prevent friendly-fire engagements. Reconnaissance units tended to suspect any vehicles and movement detected first as enemy, since they were well forward of friendly forces.

Cavalry were to use their mobility and speed to cover as much ground as possible to locate and report the enemy. While moving, all-round observation

© Osprey Publishing • www.ospreypublishing.com

An M8 of the 115th Cav Grp (Mech) moves cautiously down a narrow road between hedgerows, followed by an M3A1 halftrack. The armored car is retrofitted with a ring mount for the .50cal MG, allowing 360º traverse without rotating the turret. The front fenders (mudguards) have been knocked off. The canvas tarp carried on the front glacis plate was used to cover the turret in bad weather. (Tom Laemlein, Armor Plate Press)

was maintained, to include air guards. In a movement column, odd-numbered vehicles observed to the left and even-numbered to the right. Reconnaissance vehicles, regardless of type, operated in at least pairs. One vehicle would move forward, preferably using terrain and vegetation for some degree of concealment, or zigzagging if in the open. The second vehicle would cover the first before moving up. They might "bound," i.e. with the second vehicle joining the first and then leading off for the next bound; or they might "leapfrog," with the first vehicle gaining a position and the second vehicle continuing past it to the next position. A man in the lead vehicle observed to the rear to watch for signals from the covering or supporting vehicle. If approaching a town, forest, or other area that might conceal an enemy force, the reconnaissance vehicles would, if at all possible, approach from a less obvious angle than driving straight in from the direction of the main friendly force.

Ideally, contact with the enemy would be made by observation and without the enemy being aware of the reconnaissance unit's presence. It would continue to observe and report while avoiding contact with enemy patrols. If the reconnaissance unit was discovered and met resistance, then it would withdraw to cover and keep the enemy under observation. Once concealed from the enemy it might move to another location still affording observation, in order to avoid artillery, mortars, and combat patrols intent on driving it away. Its elements would attempt to pinpoint enemy positions, flanks, weapon locations, obstacles, minefields, activities, and indicators of future actions, and to identify units.

When combat was necessary to accomplish a reconnaissance mission the subunits supported each other, employing fire and maneuver to advance, but were to avoid becoming so decisively engaged that they were unable to disengage. One element might contact and pin down the enemy while another continued on the mission.

Reconnaissance by fire would be employed by patrols by firing on likely enemy positions, causing them to believe they had been detected and provoking them into opening fire before the friendly force was within ideal range. It was also used to provoke known defending forces to reveal their

© Osprey Publishing • www.ospreypublishing.com

One of many duties cavalry units undertook when securing lines of communications was laying telephone wires. Here wiremen are guarded by a trooper carrying an M1 Thompson submachine gun. (Tom Laemlein, Armor Plate Press)

positions, particularly those of crew-served weapons. Patrols would use their firepower either to break off combat with a superior force, or, if resistance was light, to break through an enemy screening force and continue the reconnaissance deeper into enemy territory. Since cavalry units were armed with only light mortars and a few 75mm SP howitzers, the attachment of a supporting artillery battalion was critical in many situations. Reconnaissance units had to be cautious, so as not to be trapped behind enemy lines or engaged and enveloped by an agile and responsive superior force. The reconnaissance unit would be prepared to guide advancing friendly forces to attack positions, and would provide them with the latest battlefield information.

The group's two squadrons were assigned their own sectors, with designated routes and zones to reconnoiter. The boundary line between them was usually a linear terrain feature – a river, stream, ridgeline, or wood line. Roads and railroads, while often used as boundaries, were less than ideal, since one or the other unit had to reconnoiter this feature itself. How the reconnaissance was conducted was left up to each squadron.

Squadrons generally deployed two troops to reconnoiter a zone up to 25 miles wide. This was very much dependent on terrain and the enemy, and the zone was commonly much narrower in practice. The squadron commander normally retained a reconnaissance troop and the light tank company in reserve (support), as a source of additional patrols to conduct unplanned reconnaissance missions, or to relieve a heavily engaged troop. The tank company was held in reserve to provide fire support, or to use its inherent capability to fire and maneuver. However, if the zone was so large or the road system so poor that it prevented timely deployment of the tank company, tank platoons might be attached to the forward reconnaissance troops.

The troops and platoons would be task-organized as required by mission, terrain, extent of the zone or routes to be reconnoitered, and the enemy. The detachments conducting the patrols might be as small as two vehicles, but battlefield realities usually dictated detachments of four to six vehicles or more. This could be any mix of armored cars, machine-gun jeeps, and light tanks. Assault gun platoons would follow to provide covering fire. The light tank company was envisioned as being most effective when employed as a unit, supported by the assault guns to neutralize AT guns. Tanks could be employed on reconnaissance when enemy fire necessitated greater armor protection for reconnaissance patrols, or when terrain was too difficult for wheeled vehicles. Light tanks supported by assault guns were effective on reconnaissance, but they did suffer from limitations imposed by terrain – e.g. ground covered with large stumps or boulders, dense forest, swamps, and steep slopes with loose or muddy surfaces.

© Osprey Publishing • www.ospreypublishing.com

Cooperative German prisoners clamber down after being delivered to a unit HQ by an M8 armored car. The M8 has lost all its wheel fenders and skirt covers; so many got knocked off that there were shortages, and little effort was made to order replacements. Both the M8 and the M3A1 halftrack are fitted with tire chains. The soldier by the halftrack's left front wheel is armed with an M1928A1 Thompson; this earlier version remained in use despite being officially replaced by the M1/ M1A1 models. An M1 rifle is just visible on the front glacis of the M8, where it can be grabbed quickly by the radio operator/ assistant driver. (Tom Laemlein, Armor Plate Press)

For offensive and defensive missions the squadron would be organized in a more balanced manner, with troops operating similar to rifle companies whether mounted or dismounted, usually with two platoons forward and one in support. The tank company in particular might be used as a squadron mobile reserve. In some circumstances the group might retain a reconnaissance troop from one of the squadrons as a group reserve.

Dismounted action

Naturally, units preferred to conduct offensive and defensive operations mounted, so as to enjoy maximum mobility, firepower, and protection, but this was not always possible. The need to operate dismounted might be due to a local shortage of infantry and even of combat engineers with a secondary infantry role, or to terrain too rugged and vegetation too dense for vehicles, or to the necessity of reducing enemy fortifications and obstacles.

For dismounted action the reconnaissance troops' platoons would leave their armored cars and jeeps behind and organize into two or three squads. With only 29 men, and typically understrength, the cavalry platoon did not

When conducting line-of-communication and rear-area security missions, cavalry troops often had to clear refugees and displaced persons – e.g. escaped forced laborers from German-occupied countries – from the main supply routes, so essential military traffic could get through to the front. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

The four primary vehicles found in cavalry reconnaissance troops can all be seen here: an M5A1 light tank, a scout jeep with dash-mounted MG, an M8 armored car, and an M3A1 halftrack personnel carrier. Note the left bumper number of the jeep, "1½". Most likely "1" was the CO's jeep, and this is an additional jeep unofficially obtained for the XO and added to the troop's march order between the troop's vehicles "1" and "2". (Tom Laemlein, Armor Plate Press)

have the same capabilities as a 40-man rifle platoon. Technically, nine drivers had to remain in the train with the vehicles, although often men from the troop headquarters would provide drivers, thus freeing platoon personnel for frontline duty. (However, the HQ could not afford to contribute too many drivers without degrading its own support functions.) The dismounted platoon might take one or more .30cal machine guns, perhaps one per squad if in the defense. They also might carry a bazooka, and possibly a 60mm mortar. In dismounted actions the tank company served as a mobile reserve, and the assault gun troop provided fire support since there were no 81mm mortars. The dismounted platoon lacked BARs and had few M1 rifles, and carbines and submachine guns were less than desirable as primary combat weapons.

All reconnaissance platoon members and other AFV crewmen needed to be able to drive their vehicle, operate its armament and radios, conduct dismounted scouting and combat patrolling, reduce obstacles, and perform intelligence collection, land navigation, and individual and unit protective measures.

TASK-ORGANIZATION FOR COMBAT

The cavalry group was originally envisioned as operating as a self-contained unit, with little or no augmentation except artillery and occasionally engineers. The group possessed no reinforcing assets to allocate to its two subordinate squadrons. The squadron itself had few assets to allocate between its three reconnaissance troops. A platoon of two assault guns was commonly attached to each troop, but the squadron HQ might retain control of two, four, or all six of the SP guns for centralized fire support. In this regard the assault gun troop served as a light artillery battery, although it had no fire direction center or forward observers. Likewise, the tank company's three platoons could each be attached to a reconnaissance troop in any combination. The tank company, with one or two tank platoons attached to reconnaissance troops, could serve as another reconnaissance or maneuver

© Osprey Publishing • www.ospreypublishing.com

unit, with reconnaissance platoons cross-attached to it. Cross-attachments between troops and companies could be allocated in any combination depending on mission, terrain, and enemy. They did not have to be equally or similarly allocated within each unit.

In practice, cavalry groups often received significant augmentation dependent on the mission. They would often provide the core of task forces assigned offensive, defensive, or special missions under corps control, and such task forces were often identified by the cavalry group commander's name. The attachment of a tank destroyer battalion, and one or two engineer companies or even a full battalion, was common. In rare instances a Ranger battalion was attached, and in other cases a chemical mortar company with 12× 4.2in mortars.

A prisoner is off-loaded from an M8 armored car. Note the two 5-gal fuel cans in a specially fitted side rack replacing the mine rack between the front and second wheels. The pintle hook on the rear of the M8 was fitted so that a trailer could be towed if necessary. (Tom Laemlein, Armor Plate Press)

Various combinations of tank, tank destroyer, combat engineer, and field artillery battalions and companies were attached to cavalry groups. As a reference, these units were organized and equipped as follows:

- Tank battalion. Three medium tank companies each with 17× M4 Shermans (75/76mm), and one light tank company with 17× M5A1 Stuarts. Light tank battalions had only three light companies.
- Tank destroyer battalion (self-propelled). Three companies each with 12× M10 (3in), M18 (76mm), or M36 (90mm) TDs, and 8× M20 armored utility cars; and a reconnaissance company with 6× M8 armored cars, 3× M20 armored utility cars, and 12× machine-gun jeeps.
- Tank destroyer battalion (towed). Three companies each with 12 halftrack-towed 3in M5 AT guns, and only two reconnaissance platoons in the HHC.
- Combat engineer battalion. Three companies reorganized as lightly armed motorized infantry, but they could also perform engineering and bridging tasks.
- Field artillery battalion. Three batteries each of 6× 105mm M2A1 towed howitzers. 155mm battalions might be attached or placed in general support, with three batteries each of 6× 155mm M1A1 howitzers. Armored field artillery battalions had three batteries each of 6× 105mm M7 (Priest) self-propelled howitzers.
- Antiaircraft artillery battery. 8× M13/M14 twin or M16/M17 quad .50cal SP machine guns, and 8× 40mm M1 towed AA guns.

A post-war study of the employment of cavalry groups showed the types of units that might be attached from corps and divisional assets to reinforce a group for specific missions. The attachments of units in direct support – see below – were not standards, and might range from no attachments whatever to the maximum shown; the 'Normal' configuration was much more common than the 'Maximum'. This list is a compilation of the

© Osprey Publishing • www.ospreypublishing.com

experiences of several cavalry groups; as can be seen, the reinforced cavalry group could be a substantial force:

Typical cavalry group attachments

Mission	*Normal*	*Maximum*
Offensive	1× FA Bn	2× FA Bn
	1× TD Bn	1× TD Bn
	1× Engr Co (as engr)	2× Engr Bn (as inf)
		2× Engr Co (as engr)
Defensive	1× FA Bn	4× FA Bn
	1× TD Bn	1× TD Bn
	1× Engr Co (as engr)	4× Engr Bn (as inf)
		1× Engr Bn (as engr)
		1× Signal Plat
Security	1× FA Bn	1× FA Bn
	1× TD Co	1× TD Bn
	1× Engr Co (as engr)	1× Engr Co (as engr)
		1× Engr Bn (as inf)
Reconnaissance	None	1× Tank Bn
		1× TD Bn
		1 × FA Bn
		2× Engr Co (as engr)

When a single artillery battalion was attached it was normally in direct support under the control of the cavalry group. When more than one was attached, one would be in direct support and the other(s) in general support, i.e., not physically present with the group and still under the control of corps or division artillery, and also tasked to support other units.

Tank destroyer and tank companies and battalions commonly operated in support of the reconnaissance troops. They remained to the rear unless there

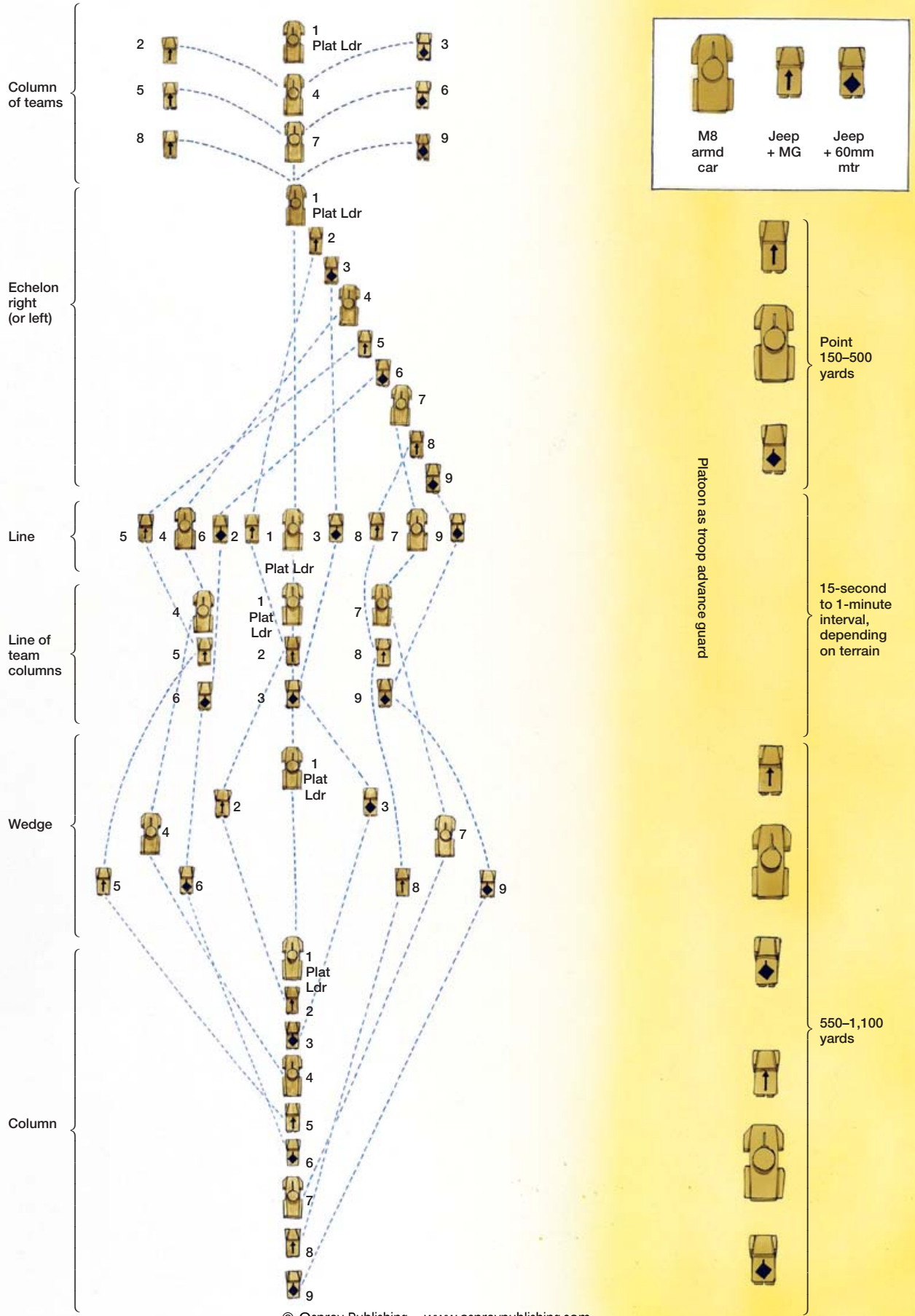
C **FORMATIONS – RECONNAISSANCE TEAMS**

During the conduct of reconnaissance missions, platoons organized two or three teams of mixed combinations of vehicles to reconnoiter different routes and areas. When operating as a mounted platoon in offensive and pursuit operations they would form up in three teams, which might be composed of the same types of vehicles or of mixed types. The movement formation depended on the terrain, visibility, and enemy situation to allow the maximum amount of firepower to be directed at the threat. In a **movement column**, odd- and even-numbered vehicles observed to the left and to the right. This was the most commonly used formation, since fast-paced operations were often conducted on roads. When vehicles pulled off to halt at the roadsides they parked on alternating sides – odd to the left, even to the right – in what was known as a "herringbone" formation.

Ideally the interval between vehicles was 50 yards, but this varied depending on intra-visibility between vehicles; the interval was much greater when in the open or on roads, and where there was an air threat. Often the platoon sergeant's vehicle brought up the rear, to collect strays and report broken-down vehicles. The distribution and internal organization of the platoon formation could be tailored to the needs of the mission. The platoon column (**far right**) demonstrates such tailoring, here for a platoon moving down a road as the advance guard of its troop. The point (lead) team were spread over a distance of 150–500 yards, followed by a 15-second to one-minute gap depending on terrain (i.e. the point had to remain in view of the second element's lead vehicle). The second element (platoon main body) spread out over a distance of 550–1,100 yards, depending on terrain. The main body of the troop followed a minute or two behind them.

The platoon was the smallest unit to initiate an attack. When it was necessary to engage in combat, the platoon attacked if the enemy force was small enough. Surprise, speed, and coordination were essential. Maneuver was conducted mounted if possible, but owing to terrain, obstacles, and enemy firepower all or part of the platoon might have to dismount and conduct fire-and-maneuver. When reconnaissance indicated that enemy strength was beyond the capabilities of the platoon, reinforcement by other elements of the troop was requested (see Plate D.) This might include the troop's own tanks or assault guns, and/ or tank destroyers attached to the troop.

© Osprey Publishing • www.ospreypublishing.com



© Osprey Publishing • www.ospreypublishing.com

Add-on racks for bedrolls and personal gear have been fitted on this halftrack rolling through a German village. There are at least two M1919A4 machine guns mounted in the troop compartment; ammunition crates are stowed in the side mine rack, which has been heightened with an added upper railing. (Tom Laemlein, Armor Plate Press)

was an immediate armored threat that might confront patrols. They were also used to engage dug-in forces, and, if resistance was light, they might help force a way through. In the pursuit, tanks and TDs would often take the lead since enemy tanks, assault guns, AT guns, and Panzerschreck/ Panzerfaust teams would lie in wait. A major deficiency was that the cavalry group had few troopers available for close-in protection of TDs and tanks, and insufficient infantry to clear and hold terrain.

Engineers could reorganize as infantry, but with limitations.[6] They were more frequently used in defensive or very limited offensive operations. They possessed fewer machine guns, no BARs or mortars, and few supporting weapons other than bazookas; their radio and telephone communications capabilities were limited, and infantry combat was very much their secondary role. Each of the engineer company's nine squads had a dump truck doubling as a troop transport, but when employed as infantry they were often unable to use their trucks because of rugged terrain. Engineer units were also tasked to provide combat support to the cavalry by breaching obstacles, clearing minefields, neutralizing booby traps, and repairing roads and bridges. They also contributed their expertise to the reconnaissance and assessment of routes, bridges, and river crossing sites.

CAVALRY GROUP DEPLOYMENTS

Cavalry groups brought with them the rich history of the cavalry regiments they sprang from, whether Regular Army or National Guard. In 1943 and 1944 these were converted to two-squadron cavalry groups (mechanized), undergoing reorganization and receiving new equipment. Nine of the groups were Regular Army, of which eight saw combat; of the seven National Guard groups, five saw combat. Their training in the States as mechanized regiments complemented their cavalry group mission. Most units undertook extensive training, and frequently moved from post to post; this gave them familiarity

6 See Osprey Warrior 147, *US Combat Engineer 1941–45*

© Osprey Publishing • www.ospreypublishing.com

with railroad movements and experience on different terrain. Most took part in large-scale corps and army-level maneuvers. Most units also undertook training in the UK before shipping to France, and even after crossing the Channel they were often given a short shakedown period.

After the war ended most groups undertook occupation duty; they then either returned to the States (usually at zero strength, after the troops had already been repatriated) and were inactivated, or they were converted to units of the US Constabulary. Established in 1946 and disbanded in 1952, this was a military police/ combat force responsible for occupation and security in the US Zone in Germany. It consisted of three brigades and 10 regiments, and many of its units were converted from mechanized cavalry groups.

Examples of cavalry group task forces

Task Force Polk – Defense of the Moselle river, France, October 1944
3rd Cav Grp, Mech
- 3rd Cav Recon Sqdn
- 43rd Cav Recon Sqdn

40th FA Grp
- 241st FA Bn (105mm towed)
- 689th FA Bn (155mm towed)

1st Bn, 33rd Inf Regt
137th Engr Bn (Combat) (as infantry)
807th TD Bn (3in towed)
1 Regt de Paris (French)
2 Regt de Paris (French)
Bn Divisionnaire (French)
Bn Freddy (French)

Note: French units were partisans.

Task Force Pickett – Offensive from Koblenz to Frankfurt-Giessen Autobahn, March 1945
6th Cav Grp, Mech
- 6th Cav Recon Sqdn
  - Co K, 3rd Bn, 304th Inf Regt
  - Co A, 44th Engr Bn (Combat)
  - Co B, 808th TD Bn (M36)
- 28th Cav Recon Sqdn
  - Co L, 3rd Bn, 304th Inf Regt
  - Co C, 293rd Engr Bn (Combat)
  - Co C, 808th TD Bn (M36)
- 253rd Armd FA Bn (105mm SP)

2nd Cavalry Group

Motto: *Toujours Pret* ("Always Ready")

The 2nd Cav has borne a number of designations: 1836, 2nd Regt of Dragoons; 1843, 2nd Regt of Riflemen; 1844, back to 2nd Regt of Dragoons; 1861, 2nd Cav Regt. It was inactivated as a horse regiment on July 15, 1942 and its personnel and equipment transferred to the new 2nd Armd Regt. A new 2nd Cav Regt (Mech) was activated on January 15, 1943 at Ft Jackson, SC. On Dec 22, 1943 it was reorganized as the 2nd Cav Grp (Mech), with its 1st and 2nd Sqdns becoming the 2nd and 42nd Cav Recon Sqdns. It departed New York for the UK in April 1944. Landed in Normandy on July 19, 1944, it secured lines of communication. Attached to VII Corps, it saw action in September; entered Germany in November with the 26th Inf Div; returned to France in November; entered Luxembourg in December; then re-entered Germany in March 1945, crossing the Rhine. It entered Czechoslovakia in May, and performed occupation duty in Austria. On May 1, 1946 it was redesignated the 2nd Constabulary Regiment.

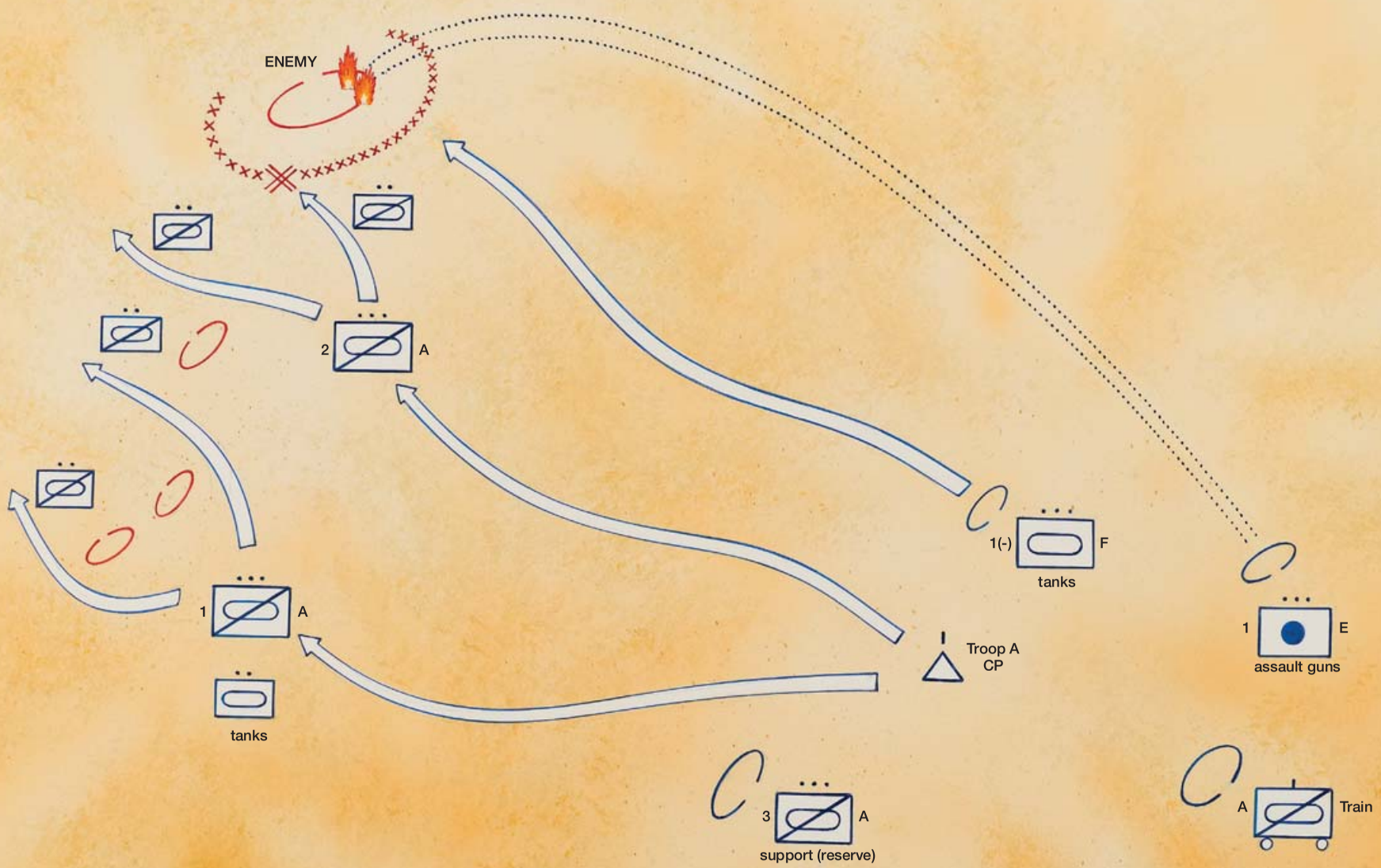
3rd Cavalry Group

"Brave Rifles"

Organized as the Regt of Mounted Riflemen on May 19, 1846, it became the 3rd Cavalry Regt in 1861. At the start of the war it performed ceremonial and

In early 1945 cavalry recon squadrons began receiving M24 Chaffee light tanks (left), to replace their M5A1 Stuarts on a one-for-one basis. The Chaffee mounted a more potent 75mm gun, was faster, and had slightly wider tracks providing better cross-country performance, and its armor – while no thicker than the Stuart's – was better sloped. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com



© Osprey Publishing • www.ospreypublishing.com

security duties in Washington, DC as a horse-mechanized regiment, and was inactivated on July 15, 1942, its personnel and equipment transferring to the 2nd Armd Regt. A new 3rd Cav Grp (Mech) was activated on March 15, 1943 at Ft Gordon, GA, with the 3rd and 43rd Cav Sqdns. The regiment departed Boston for the UK. Arriving in France on August 9, 1944, it supported XX Corps. The 3rd Sqdn assaulted fortresses near Metz as infantry. Entering Germany in November, it returned to France in December, and again entered Germany in February 1945. In March 1945 it operated as part of the 316th Cav Brigade. It conducted occupation duty in Austria until returning to the States in December, and was inactivated at Camp Kilmer, NJ on December 22, 1945.

4th Cavalry Group

"Prepared and Loyal"

Activated as the 1st Cav Regt on March 3, 1855, it was redesignated the 4th Cav in August 1861. The beginning of World War II found it a horse-mechanized regiment, and in April 1942 it was redesignated the 4th Cav Regt (Mech). In November 1943 it departed New York, arriving in the UK the next month. On December 21, 1943 it became the 4th Cav Grp (Mech), with the 4th and 24th Cav Sqdns. Landed in Normandy on June 6, 1944, it was attached to VII Corps. It entered Belgium in September, then Germany, and was involved in the Ardennes counteroffensive. It re-entered Belgium in December, and Germany in February 1945. Conducting occupation duty in Germany, it was redesignated the 4th Constabulary Regt on May 1, 1946.

D CAVALRY TROOP CONDUCTING RECONNAISSANCE

During reconnaissance operations the reconnaissance troop's platoons operated under decentralized control, usually with two reconnoitering and one in support (reserve). Owing to this decentralized control and the broad area over which reconnaissance teams operated, radio communication was essential, and the troop was well equipped for this. The platoon's three squad leaders' jeeps each had an SCR-510 FM radio linked to the three armored cars' SCR-508s, which is why the jeeps normally operated in at least pairs. The three armored cars could communicate with the other platoons within the troop and with the troop commander via their SCR-508s. They could also communicate with the troop commander via their SCR-506 AM radios when longer range was necessary, and served as a backup to the FM radio net. The SCR-508 could transmit voice and Morse code. The FM SCR-508 and 510 radios were line-of-sight (i.e. stations did not have to be literally within sight of one another, but major terrain features between them interfered with reception.) The reconnaissance teams could also communicate via colored smoke grenades and flares, tracer fire to mark targets, signal flags, and motorized messengers.

The troop conducted reconnaissance as a unit only in the sense that its commander controlled and coordinated the platoons' activities. The platoon was the basic tactical unit, and separate missions were assigned each platoon. The troop commander could influence its actions, whether reconnaissance, offensive, defensive, or security, by retaining one platoon in support (reserve). He might also employ the routinely attached assault gun section with two 75mm M8 SP howitzers, and – if attached – a light tank platoon or section. Tanks would be attached to troops if the squadron front was so broad or the terrain so difficult that reserves could not readily be moved to all parts of the squadron zone. They would also be attached if heavy enemy resistance was expected. Medium tank (M4) and/or tank destroyer platoons and sections might also be attached. The use of tanks and TDs, the employment of the support (reserve) reconnaissance platoon, and the assault gun platoon's fire support, coupled with excellent communications, allowed the troop commander to influence his portion of the battlefield and allowed him enough flexibility to take the initiative.

Depicted here are Troop A's 1st and 2nd Platoons, each split into two teams to reconnoiter specific routes (three dots over a box symbol represents a platoon, and two dots a section). Both platoons have bypassed small pockets of enemy resistance. The 3rd Platoon is in support ready to deploy as needed; the troop CO will retain the support platoon as long as possible, and will not commit it to just any engagement. The attached light tank platoon (1st Platoon, Company F) has detached a two-tank section to support 1st Reconnaissance Platoon. The 2nd Reconnaissance Platoon has encountered enemy resistance; the troop CO has dispatched the remainder of the tank platoon in support, and the attached assault gun platoon (1st Platoon, Troop E) is delivering indirect fire on the enemy position. The Troop A Command Post remains static for the time being, to control operations. The troop train with the service elements is in the rear, ready to provide whatever logistical support is necessary.

© Osprey Publishing • www.ospreypublishing.com

As an engineer Caterpillar D-4 light bulldozer fills bomb craters, a reconnaissance unit passes through a town. The M8 HMC self-propelled howitzer is followed by a Fargo Motors 1½-ton cargo truck, and more distantly by an M3A1 halftrack personnel carrier. (Tom Laemlein, Armor Plate Press)

6th Cavalry Group

Ducit Amor Patriae ("Led By Love of Country")

Activated on May 5, 1861, the 3rd Cav Regt was redesignated the 6th in August. From the outbreak of World War II until July 1942 it was a horse-mechanized unit, and was then reorganized as a mechanized cavalry regiment. It departed New York in October 1943 and arrived in N. Ireland, where it was reorganized on January 1, 1944 as the 6th Cav Grp (Mech), with the 6th and 28th Cav Sqdns. In July 1944 it arrived in France, where Gen Patton employed it as an "information service" for the Third Army. The 6th entered Luxembourg in December 1944, and Germany in February 1945 with VIII Corps. During occupation duty in Germany it was redesignated the 6th Constabulary Regt on May 1, 1946.

11th Cavalry Group

Allons ("Let's Go!")

The 11th Cav Regt was raised on February 2, 1901. It remained a horse regiment until inactivated on July 15, 1942, when its personnel and equipment transferred to the 11th Armd Regt. On May 3, 1943 it became the 11th Cav Grp (Mech), with the 36th and 44th Cav Sqdns. Departing New York in September 1944, it arrived in the UK the next month and then in France in November. The group entered the Netherlands in February 1945, and went into Germany with XIII Corps. Undertaking occupation duty in Germany, it was converted to the 11th Constabulary Regt on May 1, 1946.

14th Cavalry Group

Suivez Moi ("Follow Me")

Activated as the 14th Cav Regt on February 2, 1901, this horse unit was inactivated on July 15, 1942, and personnel and equipment transferred to the 14th Armd Regt. It was reactivated on July 12, 1943 as the 14th Cav Grp (Mech), with the 18th and 32nd Cav Sqdns (32nd raised as 27th in Panama). It departed New York and arrived in the UK in August 1944. Shipped to France in September, it entered Luxembourg the next month, then Belgium in December, being caught up in the Ardennes

Cavalry groups

Cav Grp	*Cav Sqdns*	*Active**
2nd	2nd, 42nd	1943–46
3rd	3rd, 43rd	1943–45
4th	4th, 24th	1943–46
6th	6th, 28th	1944–46
11th	36th, 44th	1943–46
14th	18th, 32nd	1943–46
15th	15th, 17th	1944–46
16th	16th, 19th	1943–46
29th†	127th–129th inc.	1944–45
101st	101st, 116th	1943–45
102nd	38th, 102nd	1944–45
104th†	104th,‡ 119th	1944
106th	106th, 121st	1944–45
107th†	22nd, 107th‡	1944–45
113th	113th, 125th	1944–45
115th	115th,‡ 126th‡ 104th,‡ 107th‡	1944–45

Separate reconnaissance squadrons

Cav Sqdn	*Assignment*	*Active*
22nd†	107th Cav Grp	1944
34th†		1944–45
45th†		1944–45
91st	Fifth Army	1941–45
117th	Seventh Army	1943–45
119th†	104th Cav Grp	1944
126th†		1944

Notes:

* Active years are from when redesignated as cavalry groups from cavalry regiments (mechanized), to inactivation or conversion to Constabulary regiments.

† Did not deploy overseas.

‡ 104th, 107th, 115th, & 126th Cav Sqdns were attached to two different groups.

© Osprey Publishing • www.ospreypublishing.com

January 1945: men of the 14th Cav Grp (Mech) examine the crater left by a 15cm shell that destroyed one of the unit's M5A1 tanks. The 14th had arrived in France in September 1944, and subsequently – like the 4th, 102nd and 113th Groups – saw action during the Ardennes campaign. It would enter Germany in February 1945, to fight in the reduction of the Ruhr Pocket. (Tom Laemlein, Armor Plate Press)

campaign. It entered Germany in February 1945 to fight in the Ruhr Pocket. On occupation duty in Germany, it was converted to the 14th Constabulary Regt on May 1, 1946.

15th Cavalry Group

Tous Pour Un, Un Pour Tous ("All for one, one for all")

The 15th Cav Regt was activated on February 2, 1901. It was inactivated in October 1921, and reactivated on March 22, 1942 as the 15th Cav Regt (Mech). It departed New York in March 1944 and landed in England, where on March 12 it was reorganized as the 15th Cav Grp (Mech), with the 15th and 17th Cav Sqdns. It arrived in France in July 1944 to operate under Ninth Army and XIV Corps. It entered the Netherlands in February 1945, and Germany in March. Performing occupation duty in Germany, it was reorganized as the 15th Constabulary Regt on May 1, 1946.

16th Cavalry Group

"Strike Hard"

The 16th Cav Regt was activated on July 1, 1916, and inactivated in November 1921. It was reactivated on June 15, 1942, and on November 22, 1943 it was reorganized as the 16th Cav Grp (Mech), with the 16th and 19th Cav Sqdns. It left New York for the UK in November 1944. It landed in France in February 1945, operated with the Third Army and XX Corps, and entered Germany in March, when it operated as part of the 316th Cav Brigade. Conducting occupation duty, it was reorganized as the 16th Constabulary Regt on May 1, 1946.

101st Cavalry Group

"To the Utmost"

This New York National Guard unit began life as the 1st NY Cavalry in 1861. It served as machine-gun battalions in World War I, and was

© Osprey Publishing • www.ospreypublishing.com

reconstituted as the 101st Cav Regt in 1922. It was inducted into Federal service on January 27, 1941, and soon converted to horse-mechanized. On December 21, 1943 it was reorganized as the 101st Cav Grp (Mech), with the 101st and 116th Cav Sqdns. Departing New York in October 1943, it arrived in the UK in November. It landed in France on January 31, 1945 and was attached to XV Corps. It entered Germany in February; after performing occupation duty it returned to the States in October 1945, and was inactivated on October 25.

102nd Cavalry Group

Fide et Fortitudine ("By Fidelity and Fortitude")

Raised on May 19, 1913 as the 1st New Jersey Cav Sqdn, which served in World War I as artillery and military police. Re-established as the 1st Cav Regt in March 1921 in the NJ National Guard, it was redesignated the 102nd Cav Regt that August. Inducted on January 6, 1941, it converted to a horse-mechanized unit in November, and then to a mechanized regiment in April 1942. Departed New York in September 1942; in the UK on October 6 it was reorganized as the 102nd Cav Grp (Mech). The 2nd Sqdn was transferred to Algeria and redesignated the 117th Cav Sqdn (see below). The 1st Sqdn became the 102nd, and the 38th Cav Sqdn was assigned, itself redesignated from the 3rd Recon Sqdn of the 1st Cav Div. It landed in France in June 1944, supporting V Corps. Entered Belgium in September, then Germany and Luxembourg, and back to Belgium again. Re-entered Germany

E **FORMATIONS – CAVALRY RECONNAISSANCE SQUADRON**

The cavalry reconnaissance squadron could be task-organized in several ways, of which five examples are depicted here. (**Key:** a box with one 'stalk' represents a troop or company, three dots a platoon. Troops A to C are reconnaissance troops, Troop E the assault gun troop, Company F the tank company, and HHS is the HQ and HQ & Service Troop.)

Unit task organization was not limited to these examples; any combination was possible, and if medium tanks, tank destroyers, and/ or combat engineer companies or platoons were attached the combinations were almost limitless. However, overly complex structures, and breaking subunits down into smaller than platoon echelons for attachment to different troops, was generally avoided, in order to ensure tactical integrity under the control of platoon commanders.

E1: Reconnaissance troops A and B forward, each reinforced by an assault gun platoon. One reconnaissance platoon from Troop C is forward in support of either troop; the tank company and Troop C (less a platoon) are in reserve. The remainder of the assault gun troop is in general support of the forward troops, or can support the tank company or reserve troop.

E2: All three reconnaissance troops forward and reinforced by assault gun platoons. One tank platoon in support; the remainder of the tank company in reserve.

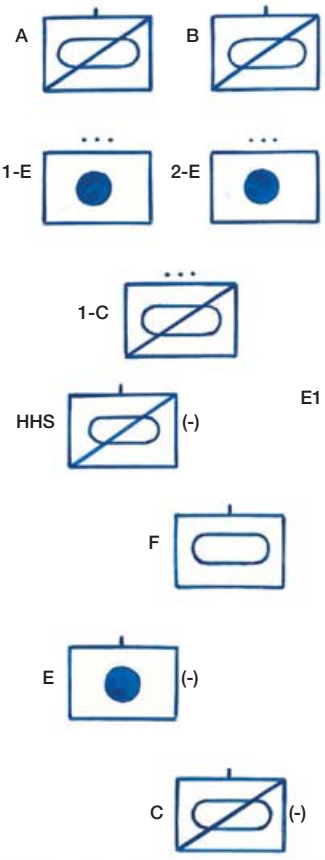
E3: Two reconnassance troops forward, each reinforced by an assault gun platoon and a tank platoon. Troop C is in reserve. The tank company's one remaining platoon is in support, or can reinforce Troop C if it is committed.

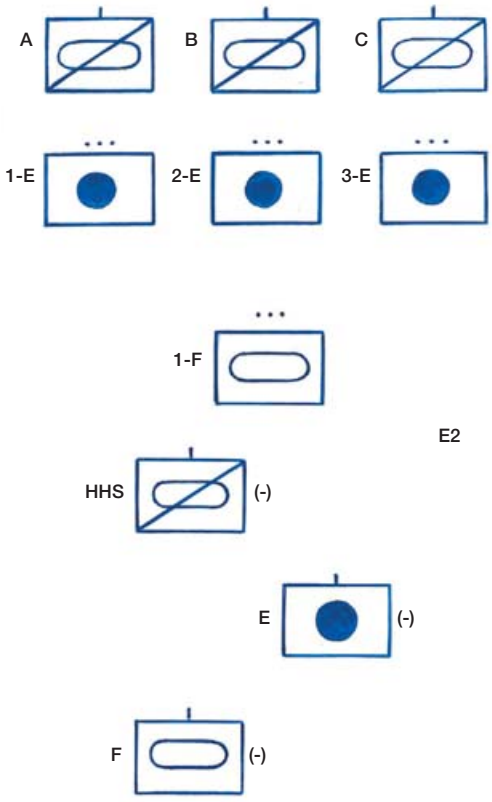
E4: Two reconnaissance troops and the tank company forward, each reinforced by an assault gun platoon. These three forward elements are supported by a reconnaissance platoon, with the remainder of Troop C in reserve. When heavy enemy resistance or difficult terrain was expected, the tank company was assigned to one of the routes of advance; however, it lacked the versatile capabilities of a reconnaissance troop in gaining and holding ground.

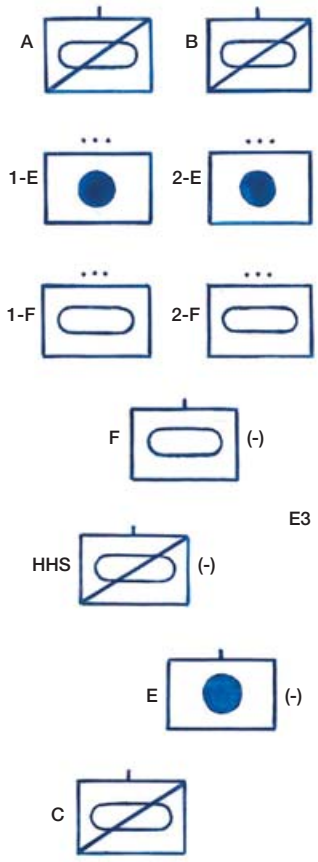
E5: All three reconnaissance troops, each reinforced by an assault gun platoon, are forward, along with a tank destroyer company (less a platoon). Troop C is minus a platoon, which is attached to the TD company. The TD company is assigned a route where heavy enemy resistance is expected. The tank company (less a platoon) is in support of the forward elements. A tank and a TD platoon are in reserve.

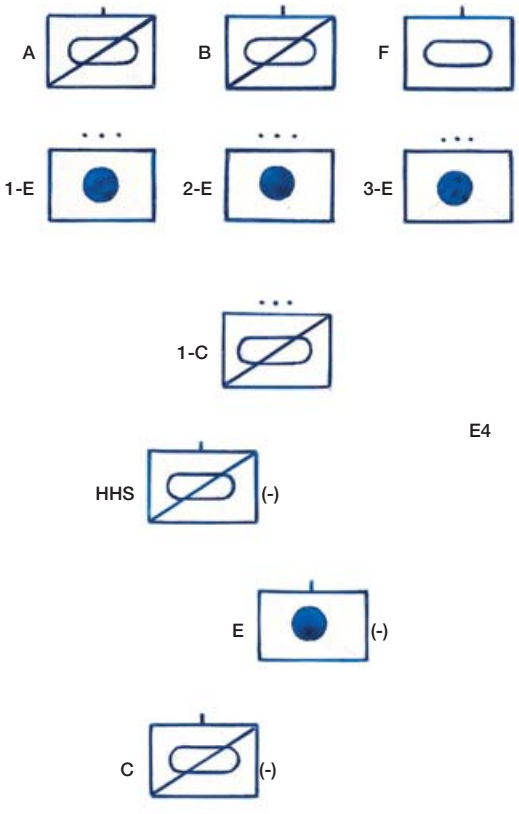
It cannot be overemphasized that task-organization at any echelon was determined by terrain, the nature of the routes, visibility, and expected enemy resistance and obstacles. The forward troops did not necessarily have to have an equal balance of attachments. The internal task-organization of the reconnaissance troops would also differ, at the choice of the troop CO.

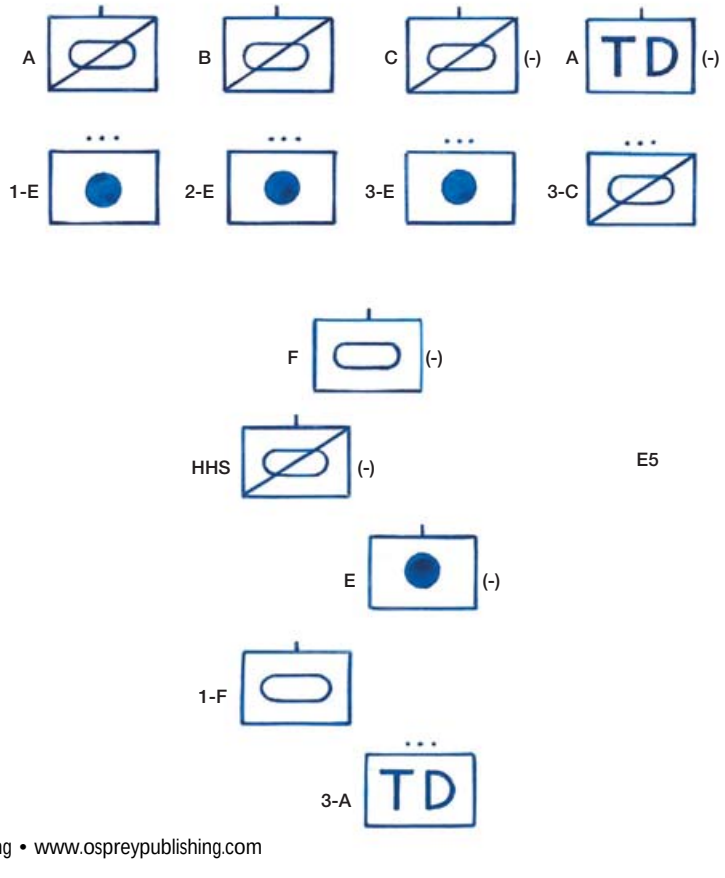
© Osprey Publishing • www.ospreypublishing.com











© Osprey Publishing • www.ospreypublishing.com

An M5 of 17th Cav Recon Sqdn, 15th Cav Grp (Mech), halted in partial hull defilade and rigged with overhead "shrimp net." Note the glacis plate typically cluttered with stowage, including a spare road wheel; and also the Culin hedgerow-buster on the nose. This unit had landed in France as early as July 1944, during the fierce fighting in the Normandy *bocage*. (Tom Laemlein, Armor Plate Press)

in November and engaged in the Ardennes, then returned to France in March 1945, and back to Germany. Entered Czechoslovakia in May and conducted occupation duty. Returned to the States in October, it was inactivated on October 22, 1945.

106th Cavalry Group

Utcumque Ubique ("Any Where at Any Time")

Raised on July 3, 1861 as the 1st Regt Illinois Volunteer Cav Regt. The Illinois National Guard unit was inducted on November 20, 1940 and made horse-mechanized. Departed from New York for the UK in March 1944, it was reorganized on March 14 as the 106th Cav Grp (Mech), with 106th and 121st Cav Sqdns. It landed in France in July 1944, attached to VIII Corps, and fought at the Falaise Pocket and as infantry at the Fôret de Parroy. It entered Germany in December; returned to France in February 1945; re-entered Germany in March, and then to Austria. After occupation duty there it returned to the States in October, being inactivated on October 22.

113th Cavalry Group

"We Maintain"

Raised as the 1st Iowa Cavalry Sqdn in 1915, it became the 113th Cav Regt in the Iowa National Guard in 1921. Inducted on January 13, 1941, it became a horse-mechanized unit. Shipped from Boston to the UK in January 1944, on February 1 it was reorganized as the 113th Cav Grp (Mech), with the 113th and 125th Cav Sqdns. It deployed to France in July 1944 and was attached to XIX Corps, fighting at the Falaise Gap. It entered Belgium and then the Netherlands in September; entering Germany in November, it was involved in the Ardennes campaign. After conducting occupation duty in Germany it returned to the States in October 1945, and was inactivated on October 22.

© Osprey Publishing • www.ospreypublishing.com

115th Cavalry Group

"Powder River"

The 1st Wyoming Cav Regt was raised in 1919, and redesignated the 115th Cav Regt in 1922. The Wyoming National Guard unit was inducted on February 24, 1941 to become at first horse-mechanized, then mechanized. On January 1, 1944 it was reorganized as the 115th Cav Grp (Mech), with the 115th and 116th Cav Sqdns. The 115th Sqdn was disbanded, and the 116th reassigned to the 101st Cav Grp; the 104th and 107th Cav Sqdns were then attached in their place. It departed New York and arrived in France in January 1945. Attached to VI Corps, it saw combat in France before entering Germany in April, and Austria in May. After occupation duty it returned to the States in October 1945, and was inactivated on October 22.

The crew gas up an armored car of the separate 117th Cav Recon Sqdn, using 5-gal Jerry cans. The ball-pean hammer leaning against the turret was used to knock loose tight fuel caps. The boxes on the engine compartment are components of the 10-in-1 rations (fed 10 men for one day). The stowed AT mines are painted all yellow, identifying them as early production – from 1943 they were delivered painted olive drab. (Tom Laemlein, Armor Plate Press)

316th Cavalry Brigade (Provisional)

This short-lived brigade was formed by XII Corps with the 3rd (from XX Corps) and 16th (from XII Corps) Cav Grps on March 9, 1945. It operated on the northern flank of XII Corps, conducting offensive operations, and was disbanded on March 15. Attachments included 241th FA Bn (105mm), 245th Engr Bn (Combat), and Co A, 818th TD Bn (M36).

91st Cavalry Reconnaissance Squadron

"Alert"

Organized from the 1st Cav Div's 1st Recon Sqdn on May 8, 1941, it remained a separate squadron. It departed New York and arrived in North Africa in December 1942. The 91st saw action in Tunisia in April and May 1943, then landed in Sicily in July. It arrived in Italy in October 1943 to serve as Fifth Army's reconnaissance unit. It was inactivated after the war.

117th Cavalry Reconnaissance Squadron

The 117th began life as the 2nd Sqdn, 102nd Cav Regt (Mech). It was transferred from the UK to Algeria in January 1943, and was redesignated a cavalry recon squadron on November 30. It arrived in Italy in May 1944, operating under Fifth Army and attached to various divisions. It landed in Southern France with Seventh Army in August 1944, fighting across the country to enter Germany in March 1945 and Austria in May. After occupation duty in Germany the squadron was inactivated on November 25, 1945.

Uncommitted cavalry groups and squadrons

Three cavalry groups and five separate squadrons did not deploy overseas.

The 29th Cav Regt was activated on January 23, 1943 as a training unit at the Ft Knox, KY Cavalry School. It was inactivated on May 1, 1944 and its assets used to organize the 29th Cav Grp (Mech) with the 127th, 128th, and 129th Cav Sqdns, under the Replacement and School Command. It was inactivated on February 6, 1945.

© Osprey Publishing • www.ospreypublishing.com

A Stuart tank of 116th Cav Recon Sqdn, 101st Cav Grp (Mech) in the empty-looking street of a German town early in 1945, when this New York National Guard unit was operating with XV Corps. (Tom Laemlein, Armor Plate Press)

The 104th Cav Regt ("Over, Under or Through") was a Pennsylvania National Guard unit organized from the 8th Pennsylvania Inf Regiment. It was inducted on February 17, 1941 as a horse-mechanized unit. Redesignated mechanized in January 1944, it was reorganized as the 104th Cav Grp (Mech), with the 104th and 119th Cav Sqdns. It was inactivated on August 15, 1944, and its personnel used as replacements. The 104th Sqdn was reassigned to the 115th Cav Group.

The 107th Cav Regt (*Facere no Dicere* – "To Act, Not To Speak"), an Ohio National Guard unit, was inducted on March 5, 1941; at first horse-mechanized, it was redesignated and reorganized on January 1, 1944 as the 107th Cav Grp (Mech), with the 22nd (ex-1st Sqdn) and 107th (ex-2nd Sqdn) Cav Sqdns. When it was inactivated the 22nd Sqdn became a signal company, and the 107th Sqdn was reassigned to the 115th Cav Group.

The 22nd, 34th, 119th, and 126th Cav Recon Sqdns never left the States, and were broken up for replacements; the 45th was a training unit.

THE TEST OF BATTLE

Cavalry groups conducted a wide range of operations, and each mission was different from even similar ones that a unit had previously performed. What follow are a series of brief descriptions of representative operations of various types.

113th Cavalry Group: reconnaissance mission

While any type of operation involved reconnaissance, "straight" reconnaissance missions were rare for cavalry groups. This particular instance involved a reconnaissance in XIX Corps' zone of action in Belgium in early September 1944.

The 113th Cav Grp was to reconnoiter aggressively east and northeast in advance of XIX Corps in a 20-mile wide, 125-mile deep zone. The group was

© Osprey Publishing • www.ospreypublishing.com

An M8 armored car and scout jeep burn after an ambush as a scout moves forward, searching for survivors and any remaining enemy. It was common for cavalry reconnaissance units to discover the enemy's presence the hard way. (Tom Laemlein, Armor Plate Press)

to reconnoiter five main routes to be used by the corps' divisions, reporting road and bridge conditions and enemy positions, while bypassing any heavy enemy resistance. The 113th and 125th Cav Recon Sqdns – the latter less its Trp E and Co F – were augmented by Co B, 82nd Engr Bn (Combat), and the M10s of Co C, 803rd TD Battalion. No support from other corps assets was available due to lack of fuel; this reconnaissance was conducted in anticipation of resuming the offensive when sufficient fuel arrived.

The advance commenced early on September 5, with the 125th Cav Recon Sqdn on the left and the 113th on the right; each had an engineer platoon attached. That night the Namur–Brussels railroad was reached (Brussels was just outside the group's zone to the north.) The following day a TD platoon was attached to each squadron. German resistance was initially light and scattered; on September 6 it stiffened in front of the 113th, but the 125th on the left made good progress despite meeting resistance at Jodigne, which was bypassed. On the 7th, the 113th encountered stubborn resistance in St Trond; the 125th, reinforced by Trp C of the 113th, seized Hasselt before dark.

In the meantime the 2nd Armd Div was refueled and its reconnaissance elements caught up with the 113th Cav Group. The division was assigned the left portion of the corps' zone, and the 113th Cav Grp concentrated in the right. By mid-afternoon on September 8 all advance forces had reached the Albert Canal. By dark it was found that all the bridges over the canal and the parallel Meuse river just beyond it had been destroyed. The group screened the canal and the area between it and the Meuse, and reconnoitered the former Belgian strongpoint

The first US troops seen by German local civilian officials were usually from cavalry reconnaissance units. The Bürgermeister (mayor) often risked life and limb to make contact as soon as possible after the Americans appeared, in an effort to convince them that there were no German troops in the town, so as to prevent avoidable property damage and casualties. The man standing by the water can on the glacis of the M8 is armed with an M1 carbine fitted with an M8 grenade launcher. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

Scout jeeps often had accommodations for extra gas cans, since they could not count on timely resupply when ranging ahead into enemy territory. Vertical stanchions on the front bumper, as fitted to this jeep, are often assumed to be "anti-decapitation" protection against wires intentionally rigged across the road; in fact they were mainly useful against the much more common downed telephone and power lines. Note the snow/ mud chains on the rear wheels; they were more effective if fitted to all four wheels, but sometimes there were shortages. (Tom Laemlein, Armor Plate Press)

of Fort Eben Emael. On the afternoon of September 10 the 30th Inf Div reached the Albert Canal, and the 113th screened its exposed flanks.

This was an economy-of-force mission allowing preliminary reconnaissance to be conducted while the rest of the corps was stalled before resuming the offensive. While the cavalrymen avoided heavy engagements, they were able to seize a number of towns and drive off enemy resistance to pave the way for the following divisions.

4th Cavalry Group: screening mission

In September 1944 the 4th Cav Grp was attached to VII Corps, and comprised the 4th and 24th Cav Recon Sqdns, 759th Light Tank Bn (less Co A), 87th Armd FA Bn (105mm), 635th TD Bn (3in towed), and Cos A and C, 297th Engr Bn (Combat). On September 15 the group was assigned the mission of screening VII Corps' southern (right) flank during its attack on the Siegfried Line (*Westwall*) near Aachen. The attacking 4th Inf Div was to the left of the cavalry group.

The 4th Cav Recon Sqdn was in the left part of the group's 10–12 mile wide zone, with an engineer company plus a treadway bridge detachment. The 24th Cav Recon Sqdn was to the right, with a light tank company in support and an engineer platoon attached. The 87th Armd FA Bn was located in the 4th Sqdn's zone, but supported both squadrons. The terrain was hilly and densely wooded, making vehicle movement difficult, and most approaches were covered by strong German fortifications, minefields, and obstacles. The weather was cold, with heavy fogs in early morning and late evening.

On September 16 the squadrons were ordered to dispatch aggressive dismounted patrols eastward and probe the *Westwall* defenses. They encountered numerous booby-trapped roadblocks covered by small arms fire, and the forests were full of German patrols. On September 17 the 4th Sqdn repulsed an infantry company counterattack, and the 24th did the same the next day. On the18th the group's zone was widened to 12–15 miles.The cavalry patrols continued, plotting the enemy defenses and collecting a great deal of intelligence information. The attached light tanks followed the cavalry squadrons and prevented enemy patrols from infiltrating through gaps. The extent of dismounted and mounted patrols, the constant light tank activity, and

© Osprey Publishing • www.ospreypublishing.com

harassing and interdiction fire from the assault guns, attached SP howitzers, and 3in AT guns deceived the enemy into believing this was a major attack by significant forces, thus deterring any major counterattacks into the corps' flank. On October 1, V Corps took over the group's zone.

113th Cavalry Group in the defense

On the night of September 19/20, 1944 the 113th Cav Grp was tasked by XIX Corps to secure its northern flank from the Maas river in the Netherlands and eastward into Germany, on a 12-mile north-facing front terminating at Gangelt – easily a division frontage. The augmented cavalry group consisted of the 113th and 125th Cav Recon Sqdns, 744th Light Tank Bn (less one company), 246th Engr Bn (Combat) as infantry, and Co C, 702nd TD Bn with M10s. The group was deployed from west (anchored on the Maas) to east in the order 125th Cav Sqdn, 744th Tank Bn, and 113th Cav Sqdn, which was tied into the 115th Cav Group.

To provide a better idea as to how a cavalry squadron defended, the sector of the 113th Cav Sqdn on the right flank will be examined (see also Plate F). The terrain was open and gently rolling, with excellent fields of observation and fire; to the west toward the Maas the ground was flat and wooded. Facing the cavalry group was the German 176th Inf Div supported by artillery and some Panzers.

The group was spread thinly, with only a single platoon in the group reserve and a platoon for each of the three forward defending units. Three 105mm and two 155mm howitzer battalions supported the group. Reconnaissance and combat patrols were conducted aggressively to gain information on the enemy and hamper his reconnaissance efforts. Antitank and antipersonnel minefields were established 1,000 yards or more forward of the defensive positions, backed by barbed wire obstacles; the forward edges of the minefields were fronted by trip flares and booby-trapped grenades. The engineers, while serving as infantry, contributed their skills to establishing the defense.

Cavalry troopers halt briefly to admire a sight of historic local interest as they enter a town. Note the mass of tire chains hung on the bow plate of the M8, as expedient protection against antiarmor projectiles like the Panzerfaust. The three M1A1 antitank mines can be seen in their stowage rack; their fuses were carried inside the vehicle. Note that, as so often, the easily damaged front fenders are missing. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

© Osprey Publishing • www.ospreypublishing.com

Owing to the terrain and the presence of German armor, the defense had to be prepared for tank attack. The 113th Cav Sqdn (less Trp A) was reinforced with a company of engineers and a TD platoon. The 744th Tank Bn on the squadron's left flank (less two companies) had Trp A, 113th Cav Sqdn attached, plus an engineer company, and a TD company (less two platoons). The armored cars and tanks were dug in.

The 113th Cav Sqdn deployed Trp C on its left with five armored cars, two M10 TDs, and five light machine guns. Five 60mm mortars were grouped as a mortar platoon. Trp F in the center had three .30cal and three .50cal machine guns dug in across its front. Behind them were eight dug-in light tanks, backed by two 60mm mortars. On its right flank, in an open area, two M10 TDs, a .30cal and a .50cal covered an open approach. Troop B was on the right flank; due to the nature of the rising terrain, it established an all-round perimeter defense with five armored cars, three light tanks, two .30cal and three .50cal machine guns; another .50cal and .30cal covered a gap on the right. Some 4,000 yds behind the forward positions was Trp E with its six assault guns.

The position received no large-scale or determined attacks; it was mostly a matter of patrol actions and some probes to test the defenses – the type of engagements in which the cavalrymen were adept. The defense was maintained through October and into November. On November 2 the 17th Cav Sqdn of the 15th Cav Grp was attached to the 113th Cav Grp as its reserve. On November 12, the British Guards Armd Div relieved the 113th Cav Grp, which went into XX Corps reserve.

6th Cavalry Group in the offense

The beginning of December 1944 found the 6th Cav Grp in France attached to XX Corps. The group was tasked to protect the corps' right flank, to breach German defenses at L'Hôpital, and to clear the Karlsbrunn Forest. The 6th Cav Grp (less 28th Cav Sqdn) moved into an assembly area northeast of St Avold. Owing to the railroad cuts across the line of advance, extensive mud, and thick forest, the 6th Cav Sqdn fought dismounted except for light tanks and a few armored cars. They were not allowed time for adequate reconnaissance and artillery coordination, but these difficulties were overcome.

At 0830 hours on December 2, the 6th Cav Sqdn, with Co D, 5th Ranger Bn attached, assaulted L'Hôpital on the right, while the remainder of 5th Ranger Bn conducted the main assault to the left through the forest. The

F **CAVALRY SQUADRON IN DEFENSE**
September–November 1944

This example of a cavalry reconnaissance squadron in the defense is discussed on pages 45 & 47; note that this schematic is not to true scale.

The 113th Cavalry Group's 113th Cavalry Squadron (less Troop A) was reinforced with a company from 246th Engineer Battalion (Combat) as infantry, and an M10 platoon from Company C, 702nd Tank Destroyer Battalion. The 744th Tank Battalion (Medium) was on the squadron's left flank, and the 115th Cavalry Group on its right.

The squadron's sector was protected by a mixed AT and AP minefield up to 50 yards deep, fronted by trip flares and booby-trapped hand grenades, all backed by barbed wire barriers. The squadron positions were between 800 and 1,500 yards behind the wire, dug in on defensable terrain of low ridges and hills. Troop C was on the left, with five armored cars and two TDs dug in; the troop's 2nd Platoon was in reserve (not illustrated). Company F defended the squadron center, with eight of its light tanks dug in or in hull defilade; two TDs were dug in behind its right flank. Troop B was on the right, dug in on higher ground with a 360º perimeter; it was reinforced with three light tanks. An engineer platoon was attached to each troop/ company. Troop E, with its six assault guns, was 4,000 yards to the rear of Co F, and able to cover the entire squadron front with defensive concentrations. As can be seen, the weapons employed and the layout of the defenses differed considerably depending on the terrain and unit preferences; there were no similarities between the three defending elements.

© Osprey Publishing • www.ospreypublishing.com

A .50cal machine gunner in action from the M49 ring mount on a halftrack; below it is a "liberated" souvenir sign from one of the innumerable German streets named *Hermann Göring-Straße*. While halftracks were assigned to squadron and troop headquarters they were often used to deliver additional fire support for the platoons. The .50cal MG was an excellent suppressive-fire weapon, with an effective range of 1,000–1,200 yards and much superior penetration through cover materials than .30cal weapons. (Tom Laemlein, Armor Plate Press)

Rangers were supported by the light tanks, but they became mired in the mud and were pinned by artillery and automatic-weapons fire after crossing a railroad cut. An additional problem was that coordination for artillery support from the 5th Inf Div had not been completed. When the Ranger attack bogged down the 6th Cav Sqdn vigorously continued its attack, punching into the Karlsbrunn Forest and swinging east, to envelop Carling and L'Hôpital from the rear that night. However, a German counterattack heavily supported by artillery forced the 6th Cav Sqdn back with serious casualties. The Rangers slowly advanced on the right, but did not make much headway until December 5 after fire support was obtained from the 19th FA Bn (105mm). L'Hôpital was finally captured in a pincer attack by both the 6th Cav Sqdn and the Rangers. The Rangers drove to the northwest, toward Ludweiler across the German frontier; the cavalrymen fought into the forest and through the German support, forcing the enemy artillery to withdraw. This eased the pressure on both the cavalry and Rangers, and the group was able to seize the high ground to the east overlooking the border area. Despite all the difficulties of terrain and fire-support coordination, as well as a stout German defense just beyond their border, both the dismounted cavalrymen and the Rangers had attacked aggressively.

2nd Cavalry Group in defense of a river

On December 23, 1944 the 2nd Cav Grp, attached to XII Corps, were assigned the mission of protecting the corps' right flank along the Moselle river near Moutfort, Luxembourg. It was assigned a 25-mile wide sector on the west bank of the Moselle, from Mertert in the north to Haute Kontz in the south. The group had three missions: to eliminate pockets of enemy resistance west of the Moselle; to hold the enemy east of the river; and to maintain contact between XX Corps to the south and XII Corps' 4th Inf Div to the north.

The Moselle was 500–600ft wide and up to 25ft deep. On the west bank steep hills rose up to nearly 1,500 feet, while the ground on the east bank was lower and sloped more gradually. This bank was held by infantry and machine-gun battalions, which patrolled aggressively but conducted no offensive actions. The Germans held two small bridgeheads on the west bank in the northern portion of the group's sector, at Machtum and Mertert.

© Osprey Publishing • www.ospreypublishing.com

Task Force Reed was established and organized into three teams, augmented by the 372nd and 398th Engr Regts (General Service – these were rear construction troops, each with two battalions), by 806th TD Bn (3in towed), 255th FA Bn (105mm), 276th Armd FA Bn (105mm), and a signal platoon. In the north, Combat Team Costello at Flaxweiler was composed of the 2nd Cav Sqdn (less Trp E), 398th Engr Regt, and a TD company. In the south, Combat Team Hargis at Dalheim consisted of the 42nd Cav Sqdn (less Trp E and Co F), a battalion of the 372nd Engr Regt, and a TD company. The task force reserve with the HQ at Moutfort held the 372nd Engr Regt (less a battalion), 806th TD Bn (less two companies), the 42nd Cav Sqdn's tank company, both squadrons' assault gun troops, and both attached artillery battalions. Task Force Reed was thus essentially comprised of four engineer battalions serving as infantry, six reconnaissance troops, two light tank companies, three TD companies, and eight artillery batteries (counting the assault guns).

Three defense lines were established: the outpost line on the river manned by 11 platoons, the support line on the hills 1,000–2,000 yards west of the river manned by 18 platoons, and an unoccupied reserve line 2–3 miles west of the river. Parts of this latter line would be manned in the relevant sectors if a German breakthrough occurred in the support line. The engineers prepared positions and erected obstacles, fire support was carefully planned, and an elaborate and responsive communications system was established.

Task Force Reed immediately conducted aggressive combat patrols against the two enemy bridgeheads, forcing the one at Mertert to withdraw across the Moselle. On December 30 a dismounted tank-supported attack drove the enemy from the high ground outside Machtum, the remaining bridgehead. It was quiet for the next ten days until January 11, when Trp C, 2nd Cav Sqdn attacked dismounted and fought a vicious 12-hour battle to clear Machtum town. With the west bank cleared, combat patrols were frequently launched across the Moselle. Throughout the following five weeks the task force manned the defenses, carried out patrol actions, and inflicted harassing artillery fire on the dug-in enemy. Units were frequently rotated to the rear to maintain health and morale. It was not until February 18, 1945 that a significant attack was launched across the river by the 2nd Cav Sqdn (see below).

Tank destroyers were often attached to cavalry reconnaissance units for fire support and tank-killing; here 90mm-gun M36 TDs maneuver through a town. Tank destroyer units with towed 3in M5 AT guns were also sometimes attached to cavalry units, especially when conducting defensive operations. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

While Task Force Reed saw comparatively light action, the deployment of this 5,500-man ad hoc "brigade" released an infantry division for offensive operations. The cavalry's mobility and communications system increased the flexibility of the engineers serving as infantry. The use of well-coordinated artillery, and the engineers' ability to prepare defensive positions, obstacles, and camouflage further reinforced the defense.

2nd Cavalry Reconnaissance Squadron in a river assault

After more than two months defending the Moselle river line as part of Task Force Reed, the 2nd Cav Grp was ordered by XX Corps to launch a cross-river attack on the night of February 18/19, 1945. The 2nd Cav Sqdn would launch a dismounted assault, crossing eastwards at Ehhen and attacking northeastwards to seize Wincheringen 4 miles away. The area was dominated by forested hills rising between 985 and 1,300 feet. The attack's purpose was to create a diversion for XX Corps' dawn attack to the north on February 19.

Wincheringen was defended by a company of the German 44th Machine-Gun Bn, which also manned outposts on the river. The rest of this battalion was north and south of the town, and the battalion reserve was to the east, together with reserve battle groups of the 11th Panzer Division. Only limited artillery and mortar support was available to the German defenders.

The attack plan saw the cavalry squadron crossing the river, striking northeast, and securing the hills around Wincheringen, to assure its capture and enable the force to repel counterattacks. To deceive the Germans, the crossing would be made not directly opposite Wincheringen but at Ehhen a mile further south, which offered covered approaches and two good landing sites. In order to assure surprise there would be no artillery preparation, but counterbattery and on-call defensive fires were planned. Six 3in AT guns were emplaced for direct fire support across from Wincheringen, and a chemical smoke generator company was positioned to screen the crossing, reinforcements moving up, and casualty evacuation. Engineers manned the 16ft assault boats.

The 2nd Cav Sqdn (minus Trps C and E, and Co F), reinforced by Co C, 525th Engr Bn (Combat), executed the assault at 0100 hours on February 19.

The M1 carbine was the most common shoulder weapon in cavalry reconnaissance troops, which had 91 carbines to 26 M1 rifles and 28 submachine guns. Carbines were light and handy, but lacked range, penetration through typical cover materials, and accuracy above 200 yards. They also offered dismal "knock-down" power, since the short .30cal carbine cartridge was essentially a pistol round when compared to the much more powerful .30cal round used in the M1 rifle, BAR, and machine guns. Given the apparently long range at which these cavalrymen are firing, they cannot hope to do much more than keep heads down. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

One platoon of engineers landed to secure the crossing site, followed by the remainder of the force. The crossing was completed at 0330 hours, and complete surprise was achieved. No resistance was encountered until the move toward Wincheringen, when small arms and mortar fire began; German artillery fire was mostly ineffective, impacting north of the crossing site. Before daylight the hills south and west of the town were secured and its western edge was seized. The Germans made repeated attempts to reinforce the town and launch counterattacks, but these were broken up by on-call artillery and 3in direct fire support. A final US attack to clear the town was launched at 1730 hours. The lead elements of the 10th Armd Div arrived to support the assault, and by 1900 hours Wincheringen was fully secured. This operation achieved an effective economy-of-force diversion, a river crossing, and the seizure of a defended town in support of a corps offensive.

The soldier firing around the corner of the building is armed with an M1918A2 Browning automatic rifle. The BAR was not an assigned weapon in cavalry reconnaissance units, but a few may have been obtained individually – the lack of them certainly handicapped cavalrymen committed to dismounted combat. The other three troopers carry an M1 Thompson and two carbines. (Tom Laemlein, Armor Plate Press)

316th Cavalry Brigade in the offensive

In early March 1945, XX Corps was preparing to launch an offensive eastward from Trier on the east bank of the Moselle. In order to concentrate the 94th Inf Div for its attack, the corps was forced to leave a gap between itself and XII Corps to the north, and the corps' 3rd Cav Grp was assigned to screen the gap. Third Army augmented the 3rd Cav Grp by attaching the newly arrived 16th Cav Group. The 16th was a green unit, and to ensure coordination and to break the unit in, XX Corps ordered the formation of the 316th Cav Bde (Provisional) on March 9. The 3rd Cav Gp's Col James H. Polk doubled as the brigade CO. The brigade was augmented by 241st FA Bn (105mm howitzer); 245th Engr Combat Bn (serving as infantry, but also providing engineer support); Co A, 818th TD Bn with 90mm M36s, and an air control party.

The brigade's mission was to take over the 417th Inf Regt's sector as it assembled to prepare for the 94th Inf Div's attack. The brigade was to attack eastward on March 13 as part of the XX Corps attack, protecting the corps' northern flank and maintaining contact with the advancing 94th Inf Div to its south. Prior to the arrival of the 16th Cav Grp, the 3rd had covered the brigade's 7-mile wide sector with the left (north) half secured by the 3rd Cav Sqdn and the right by the 43rd Cav Sqdn. With the arrival of the 16th Cav Grp on March 12, the 43rd Cav Sqdn shifted north. The brigade was now aligned, from north to south, in the order 3rd and 43rd Cav Sqdns (3rd Cav Grp), 91st and 16th Cav Sqdns (16th Cav Group). The brigade was supported by the corps' 416th FA Grp in direct support, and the 558th FA Bn (155mm howitzer) in general support.

The attack was launched early on March 13, with the cavalry squadrons dismounted. The squadrons' four squadron tank companies and four assault gun troops, plus the TD company, remained mounted and provided fire support. The 43rd Sqdn was pinched out of the line and went into brigade reserve on March 14, with the 16th Sqdn taking over its squeezed-down sector. The attack reached the Ruwer river on March 15, to find all the bridges destroyed. The 94th Inf Div discovered a ford, and on March 14–15 the 19th

© Osprey Publishing • www.ospreypublishing.com

The .30cal M1919A4 atop the M5A1 tank was intended for antiaircraft use, but was habitually employed against ground targets. Note the white web feed belt; olive drab belts were not introduced until late in the war. (Tom Laemlein, Armor Plate Press)

Sqdn crossed the ford and secured Sommerau and Morecheid in a dismounted attack. It then swung north and, together with the 43rd Sqdn from the west, secured Waldrach.

The cross-compartmented terrain made dismounted operations necessary, owing to the high north-to-south ridges perpendicular to the direction of advance. The high ground provided German artillery observers broad fields of observation and fire. The hills were heavily wooded, and the many streams were steep-banked and filled with high water.

The dismounted cavalrymen advanced under the covering fire of the light tanks and TDs positioned in hull defilade; the AFVs also supported the attacks by limited fire and maneuver. The engineers breached obstacles, cleared minefields, and fought as infantry when necessary. The brigade's air support party coordinated light bomber attacks to soften up objectives, and the massed artillery contributed its weight. Once a town or key high ground was seized, the cavalrymen would mount aboard tanks and TDs in the same manner as tank-infantry teams. They stayed hard on the heels of the retreating enemy, hampering his efforts to establish new defensive lines or even rearguard positions – the traditional cavalry role of pursuit. By March 18 the brigade had secured all towns in its 7-mile wide zone to a depth of 10–12 miles; it had aided in achieving the corps objective of breaking through the enemy's defenses, had prevented him from establishing a new defensive line, and started his withdrawal from the corps' zone, as well as opening a main supply route to support future operations.

The 3rd Cav Grp, after three months of continuous combat, was reassigned to the SHAEF reserve, and the now combat-experienced 16th Cav Grp took over XX Corps' cavalry mission.

101st Cavalry Group: miscellaneous missions

As an example of the wide variety of missions that a cavalry group might be assigned over a short period, and of the flexibility they demanded, the actions of the 101st Cav Grp in the last two weeks of March 1945 are worth examining.

During the first two weeks of the month the group had been conducting defensive operations near the Saar river just inside Germany under XXI Corps, and had been heavily augmented with artillery and with engineers serving as infantry. These reinforcing units had now been withdrawn, and the group's only attachments were a reconnaissance platoon and Co A of the 822nd TD Bn (3in towed) and the 4.2in tubes of Co B, 99th Chemical Mortar Battalion.

On the night of March 13/14, the group's 101st and 116th Cav Sqdns advanced deep into the opposing German positions. By the next day the enemy positions on the Saar's south bank had been cleared, three towns captured, and 54 prisoners taken. On March 16 the group was attached to the 63rd Inf Div and assembled at Hellimer, France, after the group's former positions inside Germany had been relieved by the 70th Inf Division. The TD and chemical mortar units were withdrawn from the group, but the 93rd Armd FA Bn (105mm), 63rd Cav Recon Trp, and Co K, 253rd Inf Regt were attached. On March 17 the group relieved the 253rd Inf Regt in its positions facing the Siegfried Line, where it was to maintain the defense and conduct

© Osprey Publishing • www.ospreypublishing.com

aggressive patrols. This continued until March 19, when it was determined that the enemy were abandoning their positions and withdrawing behind the Siegfried Line – a withdrawal encouraged by the group's aggressive patrolling.

Early on March 20, both squadrons launched a reconnaissance in force into the enemy zone after leaving outposts on their former defensive line. Enemy resistance was light, but the extensive minefields, destroyed bridges, cratered roads, roadblocks, and booby traps, coupled with the mud and densely wooded terrain, slowed operations. The rifle company and recon troop from the 63rd Inf Div were detached on the 20th.

That same day Trp A, 116th Cav Sqdn, with an assault gun platoon and a light tank platoon attached, was ordered to move rapidly to the 63rd Inf Div's right flank and reconnoiter the quickest route to the Siegfried Line. They captured a town, thus blocking German escape routes to the north and northwest. The rest of the group swept a zone to the front, then assembled for a new mission, to screen the division's left flank as it advanced. The group extended its zone of action by sending patrols to the west and northwest. These missions were all accomplished in the single day of March 20, with very light casualties and the capture of 104 Germans. Troop A, 116th Cav Sqdn moved on to be the first unit to make a complete passage of the Siegfried Line in the Seventh Army zone.

Dismounted reconnaissance troopers move through a German village, checking the streets for stay-behind defenders. While it was common for the cavalrymen to go into action dismounted, the tankers of Company F normally remained mounted to provide fire support. (Tom Laemlein, Armor Plate Press)

On March 21, the 101st Cav Grp was detached from the 63rd Inf Div, attached to XXI Corps, and ordered to assemble in Bitche, France. Troop A, 101st Cav Sqdn was placed on detached duty as Seventh Army HQ security, and the 93rd Armd FA Bn was detached. In preparation for a reconnaissance of the XXI Corps zone east of Pirmasens, Germany, route reconnaissance was conducted through the area beginning on March 22. German resistance west of the Rhine had collapsed, and on March 23 the group were ordered to move into the rear zones of the advancing 71st and 100th Inf Divisions. Their mission was to sweep the area clear of German stragglers; they were to enter every village and town, travel every road, and report their leading elements' locations, road and bridge conditions, minefields, and roadblocks every four hours, while maintaining contact with the two divisions.

The two squadrons departed their assembly areas in the early afternoon and reached their zones by dark, commencing their mission early on the morning of March 24. They met light and scattered resistance that the advancing infantry had bypassed. The rugged terrain, mines, obstacles, and weather slowed the operation, but by nightfall it had been completed, and for the cost of only one cavalryman killed 135 German prisoners were taken. Enemy supply and ammunition dumps, weapons stores, hospitals, and abandoned transport were discovered and reported, as were the road and

© Osprey Publishing • www.ospreypublishing.com

bridge conditions. The main roads were cleared of displaced persons, to allow supplies to roll forward and sustain the offensive into Germany.

On March 25 another mission was assigned: "Assume responsibility for the line of communications in Corps Zone. Mop up all remaining enemy elements in Corps Zone exclusive of division assembly area [the divisions would clear their own areas]. Patrol all roads in the Corps rear area, establish roadblocks and control the movement of all persons. Direct or transport all non-German nationals whether PWs or displaced persons found on the roads to the DP centers located at Pirmasens, Kaiserslautern, or Neustadt, or to the nearest town within the area capable of caring for them." From March 25 to 27 the group conducted this mission; they established roadblocks and control points throughout the corps zone, posted military government proclamations in all towns, impounded weapons and other contraband, collected displaced persons, apprehended German troops, and patrolled all main supply routes 24 hours a day.

A new mission was assigned on March 28. It was observed that Germans stragglers and small groups were drifting east into Germany, mainly on secondary roads and trails that could not be kept under constant surveillance, as well as cross-country through the forested hills. It was feared that accumulations of these stragglers would be collected by the German military police and used to reconstitute battered units. The tank companies and assault gun troops established a screen line on the roads and trails across the corps zone, acting as mobile roadblocks. The reconnaissance troops dismounted on a second line some 9 miles west of the block line, and conducted patrols and sweeps to round up prisoners and drive others into the block line. During March 25–28 the group rounded up 608 prisoners without a single casualty.

On the 29th the group reassembled, and crossed the Rhine at Worms to occupy an assembly area. They soon fanned out to screen the bridgehead, with the troops organized into small task forces reinforced with assault gun and light tank platoons; even the group HQ formed a small task force to help cover all the roads. The terrain was extremely rugged and wooded, restricting the task forces to valley roads. Small but determined rearguards harassed the US advance, destroying bridges and culverts, creating roadblocks, and laying

G CAVALRY RECONNAISSANCE TROOP IN DISMOUNTED ATTACK

The conduct of dismounted attacks by reconnaissance platoons was common, but it was a last resort; the employment of mounted firepower and at least some armor protection was naturally preferred. However, the terrain and the sometimes dense forests of Central Europe often demanded dismounted action. This required a flexible outlook: in the morning, the crew of an M8 armored car might be tooling down an *autobahn*, and in the afternoon they might be crawling up muddy, wooded hills armed with carbines and submachine guns. Their training had bestowed only basic infantry skills, and they had to learn most lessons on-the-job – and in a deadly schoolground. Standard infantry tactics were used, but a reconnaissance platoon of 20-plus men lacked the capabilities of a 40-man rifle platoon, especially since they had few M1 rifles and no BARs.

Here, two reconnaissance platoons attack a German strongpoint in wooded terrain (**1**). The 1st Platoon (**2**) are providing suppressive fire to pin the defenders down, while the other platoon use fire-and-maneuver tactics to close in. The 1st Platoon have armed themselves with a .50cal M2 (**3**) and a .30cal M1919A4 (**4**) dismounted from vehicles – ground tripods were provided for all machine guns. They also employ one of their three 60mm M2 mortars (**5**), and a 2.36in M9 bazooka (**6**). The other troopers contribute their carbine and SMG fire, but it has little effect on defenders manning field fortifications of earth parapets and logs.

To the right, the 2nd Platoon (**7**) are making staggered rushes forward, covered by one of their own light machine guns (**8**). Their advance may be poorly coordinated due to limited infantry training and poor intra-visibility. Individuals should only move when fire in their immediate area slackens rather than blindly advancing on order, which is certain to result in casualties (**9**). A light tank section (**10**) of two M5A1 Stuarts from the squadron's Company F support the assault with direct 37mm and machine-gun fire.

© Osprey Publishing • www.ospreypublishing.com

© Osprey Publishing • www.ospreypublishing.com

An M5 tank passes through an undamaged town. Note the bedrolls stowed at the rear, and the logs fastened to the sides – these were used for aid in crossing ditches, and also provided some notional protection against Panzerfausts. Even the early-model Panzerfaust could penetrate more than three times the armor protection on any part of the M5 except the 51mm gun mantlet, and later Panzerfaust 30 and 60 models could defeat 200mm of armor. (Tom Laemlein, Armor Plate Press)

mines and booby traps, and the operation was also hampered by Luftwaffe fighter attacks. Before nightfall on March 30 elements of the 4th Inf Div reached the area and relieved the 101st Cav Group.

The group was then sent north to coordinate and assist reconnaissance elements of the 12th Armd Div in its advance. Reorganized into small task forces, they were directed to advance aggressively, bypass resistance, and push forward to the next phase line as quickly as possible. The mission commenced in the early afternoon, and all elements encountered a great deal of artillery and Nebelwerfer fire while dealing with scattered rearguards, but they reached their phase line by nightfall. The next day, April 1, the group received new orders attaching it to the 4th Inf Div to conduct a screening mission on a 34-mile front.

These operations by the 101st Cav Grp in the last half of March 1945 serve to demonstrate the capabilities and flexibility of such units in rapidly changing situations. Operations were continuous, fast-paced, and allowed little time for maintenance and resupply. Everything was done on the run, and the leaders and troops at all echelons constantly had to change their focus and keep their units functioning.

3rd Cavalry Group in the pursuit

The 3rd Cav Grp's respite as the SHAEF reserve was short-lived. On April 21, 1945 it was deployed around Leinberg, Germany, re-attached to XX Corps. The group's mission was to pursue retreating German forces, to secure crossings over the Danube in the vicinity of Regensburg (more than 30 miles to the southeast), and to link up with Soviet forces advancing westwards from Vienna. The 43rd Cav Sqdn would be on the right (west) and the 3rd on the left. The slower-moving 71st (left) and 65th Inf Divs would follow the cavalry squadrons.

Reinforcing the group were the 5th Ranger Inf Bn (6 companies); Co A,

© Osprey Publishing • www.ospreypublishing.com

This abandoned M5A1 smolders after being knocked out by antitank fire. The Stuart was a 1940 design, by now wholly outclassed in the gun/armor race; it offered no worthwhile protection against even German 5cm AT guns, let alone the 7.5cm weapons that were standard by 1944. (Tom Laemlein, Armor Plate Press)

245th Engr Bn (Combat); and the M18s of Cos A and C, 511th TD Battalion. The 264th Armd FA Bn (105mm SP) was in direct support. The group HQ would move with the 43rd Cav Sqdn, and the task organization was as follows:

43rd Cav Sqdn – with three Ranger companies; Co C, 811th TD Bn; one platoon, Co A, 245th Engr Bn; and one battery, 274th Armd FA Battalion.

3rd Cav Sqdn – with 5th Ranger Bn (less three companies); Co A, 811th TD Bn; Co A (less a platoon), 245th Engr Bn; and 274th Armd FA Bn (less a battery).

The advance commenced at 0600 hours on April 22, in cold rain and snow. The terrain was hilly and densely wooded; the roads were poor and mired in mud, and some of those shown on the map proved non-existent. Roadblocks and minefields were numerous and defended by small arms and machine guns, sometimes covered by 20mm and 88mm guns. During the first day the 43rd Cav Sqdn liberated 2,000 Allied POWs from a camp, and on April 23, almost at their objective, they overran a heavily defended position northwest of Regensburg. The 3rd Cav Sqdn crossed the Vils river and then seized a bridge over the Naab river on the night of the 22nd. The Rangers, riding on armored cars, light tanks, and tank destroyers, served as light infantry. The next day the 43rd Sqdn were overlooking the Danube; the 3rd Sqdn reached the river and Regensburg on April 24, after being delayed by rough terrain and time-consuming river crossings, and by awaiting the following 65th Inf Division. The Germans had been completely routed and prevented from establishing meaningful defenses; 2,000 prisoners had been taken, and the Danube had been reached to allow crossings. Regensburg was captured on April 26, and the link-up with the Red Army was established on May 9.

© Osprey Publishing • www.ospreypublishing.com

© Osprey Publishing • www.ospreypublishing.com

CONCLUSIONS

Extensive studies of the cavalry groups' many and varied missions were undertaken after the war. The groups had proved themselves as flexible and capable units with vastly more utility than originally envisaged. They were, however, hampered by various deficiencies and limitations, and that no effort was made to correct these during the war was demonstrated by the virtual lack of changes to the T/O&E. The only significant equipment upgrade – which was indeed valuable – was the replacement of obsolete M5A1 light tanks by M24s in the war's final months.

The end of World War II saw the disappearance of some types of units, such as tank destroyer, light tank, chemical mortar, Ranger, glider infantry, and coast defense artillery. An assessment was undertaken of the cavalry groups, and it was decided to retain them in the force structure, but with much increased capabilities to improve firepower, protection, mobility, maneuverability, and flexibility.

Regardless of their light all-wheel-drive and tracked vehicles, the cavalry squadrons were capable of only marginal cross-country mobility – the M8 armored car had especially limited off-road capabilities. The units could make good time on roads, but since they were often accompanied by M4 Sherman tanks and tank destroyers the fast-moving cavalry were slowed to the relatively sluggish movement rate of these AFVs.

A more serious deficiency was firepower. The 37mm gun arming the M8 armored car and M5A1 tank was underpowered, and of little use against armor, fortifications, and troops in the open. The M24 tank's 75mm was much more effective, but still lacking in tank-killing ability, so the frequent attachment of tank destroyers to cavalry groups was necessary and valuable.

The M8 HMC self-propelled howitzer was of great value for mobile indirect fire support, but the 75mm projectile was not powerful enough.

H

FIRE SUPPORT

M8 HMCs, Troop E, 17th Cavalry Reconnaissance Squadron, 15th Cavalry Group (Mechanized); Germany, March 1945

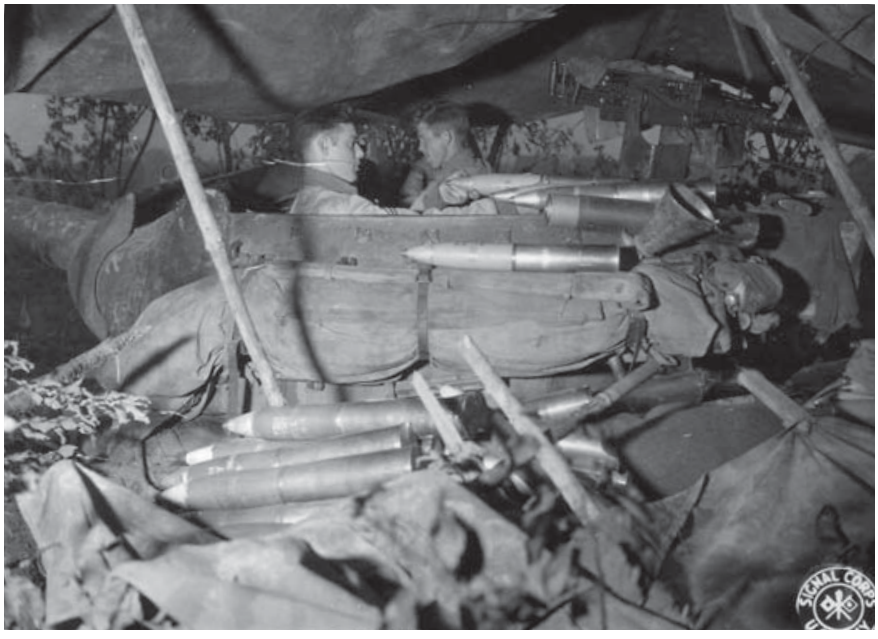
A platoon of two 75mm M8 Howitzer Motor Carriages from a squadron's Troop E were often attached to reconnaissance troops, while all or part of the assault gun troop might also be retained under squadron control for indirect fire support. Besides indirect fire up to 9,600 yards, they could also deliver direct fire. However, the lightly armored M8 HMC was by no means capable of close assault against heavy fire, and lacked coaxial and bow machine guns. Each M8 HMC was provided an M10 armored ammunition trailer carrying 117 rounds (the earlier M8 trailer carried 93 rounds). The platoon's four-man ammunition section had a third trailer towed by an M3A1 halftrack, and these were sometimes concentrated at troop level. With the 46 rounds stowed in each M8 HMC, this gave the platoon 443 rounds plus the considerable amount that could be carried in the ammunition section's halftrack. The howitzers' trailers were often left in the rear, and two could be tandem-towed by the ammunition halftrack. The seven-man platoon HQ was also mounted in a halftrack.

Cavalry squadron "bumper numbers" identified the parent field army (here, 9A = Ninth Army), followed by the squadron designation (e.g. 17R, or sometimes, as here, CR = 17th Cavalry Reconnaissance Squadron). The cavalry group to which the squadron was attached (indicated by "C-number" on its own HQ vehicles) was not identified on the bumpers of squadron vehicles, and that of the army corps the group might be attached to was not displayed.

The troop/ company designation and vehicle number within the troop (here, "E-8") was stencilled on the opposite end of the bumper, front glacis plate, or occasionally the lower bow plate. The number did not identify the vehicles within the platoons, but the vehicle's theoretical troop order-of-march number, with the troop HQ vehicles bearing the lowest numbers, followed by the platoons' vehicles in sequence. Specific individual vehicle numbering within troops varied between units. Bumper numbers were also applied on the rear of the vehicles.

The crewmen wear two-piece tankers' uniforms with the M1938 tanker's helmet with integral R-14 earphones. Tankers' uniforms were also worn by M8 armored car and scout jeep crews, sometimes with wool trousers rather than the tanker's bib-front overtrousers, but they usually wore standard M1 steel helmets, since they were often employed dismounted.

© Osprey Publishing • www.ospreypublishing.com



A view of the cramped turret of an M8 HMC under a rain tarp. Most of the 75mm rounds stacked here are HE with olive drab projectiles, but a number of light gray WP smoke rounds can also be seen. (Tom Laemlein, Armor Plate Press)

Often 105mm M7 SP howitzers were attached, but these were too heavy to keep up with fast-moving operations; a lighter-weight 105mm SP was desirable, but it would not be forthcoming. The M8 HMC was by no means an "assault gun" regardless of the unit's designation: it had a vulnerable open-top fighting compartment like the tank destroyers, and – also like them – it was too lightly armored for this role.

The 60mm M2 mortar was useful for reconnaissance by fire and defensive fires, but there were complaints that it was too light. Since there were usually vehicles available, an 81mm M1 mortar could have been carried; however, the much heavier ammunition would have been a burden, especially for dismounted operations. Another complaint was that three 60mm tubes per platoon were too many to man effectively, and were unnecessary, so many platoons only carried one mortar. There was also no fire direction center allowing massed fires of the troop's mortars. There was an abundance of .30cal and .50cal machine guns (which could be ground-mounted) as well as 2.36in bazookas, and much reliance was placed on these.

The cavalry troops had a predominance of M1 carbines, since it had been anticipated that decisive engagements would be avoided, but the short-ranged, underpowered carbine was inadequate for dismounted combat, whether offensive or defensive. There was a serious need for more M1 rifles and M1918A2 BARs to enhance the troopers' dismounted combat capabilities, especially in light of the low platoon strength (there were over five times more carbines in the squadron than M1 rifles.) The Thompson submachine gun was too heavy and too short-ranged, though effective in urban combat, night patrols, dense woodland, and when clearing fortifications. The lighter M3 "grease gun" began to replace the "Tommy gun" in mid-1944, but many units still had Thompsons at the war's end – and the M3 was even shorter-ranged than the Thompson.

The cavalry demonstrated adaptability and flexibility in the variety of missions assigned, for most of which they had not previously been trained or organized. Regardless, they lent themselves to the organization and command

© Osprey Publishing • www.ospreypublishing.com

Two M8 self-propelled howitzers halted just within a wood line – a favored firing position. A two-gun platoon was habitually attached to each reconnaissance troop for indirect fire support. While separate cavalry reconnaissance squadrons also had six M8 HMCs, the reconnaissance squadrons of standard armored divisions had eight. Light tank battalions had only three, as did armored infantry battalions, and the armored reconnaissance battalions of the 1st to 3rd "heavy" armored divisions. (Tom Laemlein, Armor Plate Press)

of task forces when augmented by units of other arms. Group and squadron staffs had never conducted command-post nor map exercises in preparation for this, much less undertaking field exercises with other units prior to deployment.

Self-sufficiency was an area in which cavalry units were weak. Since it had not been intended for them to conduct offensive, defensive, aggressive pursuit and screening missions, or dismounted operations, they lacked logistical and service assets to support attachments, and had barely enough to support themselves. They were especially deficient in motor transport to carry fuel, ammunition, rations, and other supplies to sustain themselves during long-duration mobile operations when they plunged into enemy territory. Medical personnel and equipment, to include ambulances, were insufficient for the more aggressive operations that had never been envisaged, and the medical support provided was the bare minimum.

Intended as reconnaissance units, the cavalry groups possessed only limited fighting abilities in spite of their many automatic weapons and light support weapons, since they suffered from a serious shortage of manpower available for dismounted combat. Recon men crewing armored cars and gun jeeps frequently spent as much time serving as (too lightly armed) infantrymen as they did on their wheels. Combat engineers were frequently attached to cavalry groups as infantry, but this was a secondary role – they lacked suitable automatic and support weapons, and were deficient in communications capabilities. Engineers possessed many infantry skills as well as their own specialized capabilities, but they still had to learn to practice these in combat.

During pre-deployment training cavalry units focused on reconnaissance missions, with the accompanying doctrine of avoiding combat, and they were not trained or mentally prepared for offensive combat. A major issue was the cavalry group's lack of a third squadron to employ as a reserve, so both squadrons had to remain in the line for prolonged periods without relief via rotation to the rear. This limited the group's ability to reinforce success, to relieve a worn-out advancing or pursuing unit in order to maintain the tactical tempo, and to block or counterattack breakthroughs in the defense.

© Osprey Publishing • www.ospreypublishing.com

Often recon troops and/ or tank companies were detached from squadrons to constitute a group reserve, and this in turn prevented squadrons from retaining a troop/ company as a reserve – often they had no more than a platoon for this task. Since reconnaissance platoons were so small, their strength in the line or in reserve was rather light. Reinforcement by other types of units with which they had not trained, with different equipment and capabilities, were an inadequate fix. Fortunately the natural flexibility of most unit leaders, once they had gained combat experience, allowed this expedient to work to a degree, but it was not ideal.

There was also a morale factor affecting the performance of cavalry groups. It was felt by many in the units, from top to bottom, that the reorganization of mechanized cavalry regiments (which had the same reconnaissance mission and equipment as the group) prior to the Normandy landings had an adverse effect on unit morale and administration in the new groups. It would have had an even more adverse effect had the renumbered squadrons not typically remained with their former parent regiments, now groups. In light of that fact, there had actually been no necessity to break up the old cavalry regiments, with their longstanding traditions.

The post-World War II mechanized cavalry

For a time the cavalry groups disappeared, having been converted to US Constabulary regiments. From 1948 the Army began organizing armored cavalry regiments with missions and capabilities expanded far beyond those of the World War II cavalry groups. It is notable that they returned to the traditional cavalry regiment and abandoned the group concept.

The armored cavalry regiments were structured to make them more self-sufficient without the need for reinforcement, and the new ACR was equivalent to a combined-arms brigade. The early ACRs consisted of three armored cavalry squadrons, each with three armored cavalry troops. Each of the troop's three platoons consisted of a scout section with full-tracked reconnaissance vehicles, a light tank section, a mechanized rifle squad, and a self-propelled mortar squad. The squadron also possessed a tank company

These M8 howitzers are positioned for long-term fire support; note the sleeping quarters prepared to the side – an earth berm covered with tarps rigged like tents. As the guns are positioned on gently sloping ground, flat rocks and logs have been placed under the tracks to level them. (Tom Laemlein, Armor Plate Press)

© Osprey Publishing • www.ospreypublishing.com

and a 105mm SP howitzer battery, and the regiment had a helicopter troop. During the Cold War the ACR's capabilities were vastly upgraded: the light tanks were replaced with main battle tanks, and the 105mm howitzer with the 155mm; the aviation troop expanded into a squadron of scout and attack helicopters; and organic air defense, engineer, maintenance, and chemical defense companies were assigned. The ACR became a fully integrated combined-arms force all the way down to platoon level.

The Active Army's 2nd, 3rd, 6th, 11th, and 14th Armored Cavalry Regiments have served at different times over the years. They patrolled the East German border throughout the Cold War; the 11th ACR fought in Vietnam, the 3rd ACR in "Desert Storm," and others have served in the many post-1990 contingency operations. The 107th, 108th, 116th, 163rd, and 278th ACRs have served at different times in the National Guard. With the recent Modular Force reorganization and the changing nature of warfare, only the 3rd ACR and the Guard's 278th ACR now remain.

Whether designated mechanized cavalry groups or armored cavalry regiments, the Army has maintained mechanized, combined-arms units capable of a wide array of missions, characterized by flexibility and combat power.

SELECT BIBLIOGRAPHY

Hofmann, George F., *Through Mobility We Conquer: The Mechanization of U.S. Cavalry* (Lexington, KY; University Press of Kentucky, 2006)

Morton, Matthew, *Men on Iron Ponies: The Death and Rebirth of the Modern U.S. Cavalry* (Chicago; Northern Illinois University Press, 2009)

Rose, Ben L. (ed), *The Saga of the Red Horse: A Short Account of the Combat Operations in Europe during 1944–45 of the 113th Cavalry Group Mechanized* (N.V. Drukkerij G.J. Thieme, Netherlands, 1985; available on-line: http://qcpages.qc.edu/history/wwiiveterans/Photos/jrand/Red_Horse.html)

Salter, Fred H., *Recon Scout* (New York; Ballantine Books, 2001. 91st Cavalry Reconnaissance Squadron)

Sawicki, James A., *Cavalry Regiments of the U.S. Army* (Dumfries, VA; Wyvern Publications, 1985)

Stubs, Mary L. & Connor, Stanley R., *Army Lineage Series: Armor-Cavalry, Part I* (Washington, DC: Center for Military History, 1969)

Stubs, Mary L., *Army Lineage Series: Armor-Cavalry, Part II: Army National Guard* (Washington, DC: Center for Military History, 1972)

Sweeney, Mercer W. (ed), *Wingfoot: Rhineland and Central Europe Campaigns – Official History 101st Cavalry Group (Mechanized)* (Weinheim; Hugo Diesbach, 1945. Available on-line: http://cgsc.cdmhost.com/cdm/compoundobject/collection/p4013coll8/id/857)

Yeide, Harry, *Steeds of Steel: A History of American Mechanized Cavalry in World War II* (Minneapolis, MN; Zenith Press, 2008)

FM 2-7, *Cavalry Drill Regulations, Mechanized,* March 1944. Available on-line: http://carl.army.mil/docrepository/FM2_7_1944.pdf

FM 2-20, *Cavalry Reconnaissance Troop, Mechanized,* February 1944. Available on-line: http://www.ibiblio.org/hyperwar/USA/ref/FM/PDFs/FM2-20.pdf

FM 2-30, *Cavalry Reconnaissance Squadron, Mechanized,* August 1944. Available on-line: http://www.essextroop.org/FM/FM2302.pdf

© Osprey Publishing • www.ospreypublishing.com

INDEX

Figures in **bold** refer to illustrations. Plates are shown with page locators in brackets.

Albert Canal 44
armored cars
  cross-country mobility 59
  early-production M8 **11**
  equipment on **20**, **25**, **29**, **45**
  M8 **11**, **A** (19), **B** (22), **27**, **28**, **43**
  M20 **24**
  overview 14–15
armored cavalry regiments (ACRs) 63
assault gun troops 10–11, 26, 28–29
attachments 28–32, **E** (39)

cavalry reconnaissance squadrons 9, 10, 12, 21–24, **21**
cavalry reconnaissance troops 10, **A** (19)
  reconnaissance platoons **B** (22)
cavalry units
  2nd Cav Grp 33, 36, 48–50
  2nd Cav Recon Sqdn 49–51
  3rd Cav Grp 33–35, 36, 51–52, 56–59
  3rd Cav Recon Sqdn 51–52, 56–59
  4th Cav Grp 35–36, 44–45
  4th Cav Recon Sqdn 44–45
  6th Cav Grp 20, 36, 47–48
  6th Cav Recon Sqdn 47–48
  11th Cav Grp 36
  14th Cav Grp 36–37, **37**
  15th Cav Grp 36, 37
  16th Cav Grp 36, 37, 51–52
  16th Cav Recon Sqdn 52
  17th Cav Recon Sqdn **40**, 47
  19th Cav Recon Sqdn 52
  24th Cav Recon Sqdn 44–45
  29th Cav Regt 36, 41–42
  42nd Cav Recon Sqdn 49–50
  43rd Cav Recon Sqdn 51–52, 56–59
  91st Cav Recon Sqdn 36, 41
  101st Cav Grp 36, 38, **42**, 52–56
  101st Cav Recon Sqdn 52–56
  102nd Cav Grp 36, 38–40
  104th Cav Regt 36, 42
  106th Cav Grp 36, 40
  107th Cav Regt 36, 42
  113th Cav Grp 36, 40–41, 42–44, 45–47, **F** (46)
  113th Cav Recon Sqdn 42–44, 45–47, **F** (46)
  115th Cav Grp 36, 41
  116th Cav Recon Sqdn 52–56
  117th Cav Recon Sqdn 36, 41, **41**
  125th Cav Recon Sqdn 42–44, 45–47
  316th Cav Bde 41, 51–52
  group task forces overview 33
  post-war 62–63
  pre-war 5–7
  Task Force Reed 49–50
communications 35
communications missions **26**

Danube river 57–59
defensive missions 27, 45–47, **F** (46), 48–50
dismounted action 27–28, **53**, **G** (55)

Ehhen 50–51
equipment **12**, **21**, **41**
  on armoured cars **20**, **25**, **29**, **45**
  on jeeps **21**, **44**

firepower 60–61

Germans, making contact with **43**

Hasselt 43
headgear and helmets **10**, **12**, **H** (58)
headquarters and headquarters troops (HHT) 8–9
L'Hôpital 47–48

information service missions 20, **27**

jeeps **17**, **A** (19), **B** (22), **43**
  armament **7**, **9**, **21**
  canvas tops **5**
  CO's **28**
  equipment on **21**, **44**
  overview 18
  protective stanchions **16**, **44**
Jodigne 43

Karlsbrunn Forest 47–48

light tank companies 11–12, 26–27, 29

Maas river 45
medical detachments 12–13
Meuse river 44
mission types 16–32, **B** (22), **C** (31), **D** (34)
mobility, cross-country 59–60
Morecheid 52
Moselle river 48–51
movement columns **C** (31)

offensive missions 27, 47–48, 50–52
organization
  cavalry groups 8–13, 23
  post-war units 63
  pre-war units 5–7
  task-organization 23, 28–32, **E** (39)

Panzerfausts 56
Polk, Col James H. 51

radios 35
reconnaissance missions
  examples **D** (34), 42–44, 53–56
  formations **C** (31)
  overview 16–18, 20
  tactics 24–28, **24**
  task-organization **B** (22)
Regensburg 57, 59
regiments: definition 6
Rhine river 53–56
Ruwr river 52

Saar river 52
St Trond 43
screening missions 44–45
security missions 18, 20–21
Siegfried Line (*Westwall*) 44–45, 53
Sommerau 52
squadron headquarters and headquarters & service troops 9
squadrons: definition 6–7

tactics 24–28
tanks
  Chaffees 15, **33**
  firepower 60
  Panthers **13**
  Stuarts 15, **15**, **16**, **28**, **37**, **42**, **52**, **56**, **57**
  tactical use 26–27, 35
  troop organization 11–12
  troop uniforms **H** (58)
task-organization 23, 28–32, **E** (39)
telephone wires, laying **26**
training 61–62
troop HQs 9
troops: definition 6–7

uniforms: tankers **H** (58)

vehicles
  bulldozers **36**
  compared to infantry vehicles 23–24
  halftracks **12**, **14**, 15, **20**, **25**, **27**, **28**, **32**, **36**, **48**
  howitzer motor carriages **13**, 15, **36**, **H** (58), 60, **60**, **61**, **62**
  identification numbers **G** (58)
  motorcycles **4**
  organization 8–9, 9–10, 11–12, 12–13
  overview 14–16
  scout cars **6**
  tactical use 25, **C** (31)
  tank destroyers **49**
  tank recovery vehicles 16
  trucks **36**
  see also armored cars; jeeps; tanks

Waldrach 52
weapons and artillery
  adequacy 60–61
  ammunition chests and cans **13**, **14**, **20**
  BARs **51**, 60–61
  bazookas **6**, **13**, 14
  carbines 13, **43**, **50**, 60–61
  compared to infantry weapons 21–23
  grenade-launchers **6**, **43**
  hand grenades 13
  howitzers **13**, 15, **36**, **H** (58), 60, **60**, **61**, **62**
  machine guns **6**, **7**, **9**, **12**, **21**, **32**, **48**, **52**, 60
  mines **12**, **41**, **45**
  mortars **10**, 14, 60
  organization 8–9, 10, 11, 12
  overview 13–14
  revolvers **4**
  rifles **6**, 13, **27**, 60–61
  submachine guns **4**, **7**, 13, **26**, **27**, 61
  on vehicles 14–16
Westwall *see* Siegfried Line
Wincheringen 50–51

© Osprey Publishing • www.ospreypublishing.com

Related Titles - Elite Series

epub ISBN	PDF ISBN	No.	TITLE
9781782000693	9781846037351	2	The US Marine Corps since 1945
9781780967653	9781780968230	33	South-East Asian Special Forces
9781780969824	9781782000280	34	Afrikakorps 1941–43
9781780967660	9781780968247	38	The NVA and Viet Cong
9781780967677	9781780968254	41	Elite Forces of India and Pakistan
9781780967752	9781846037337	43	Vietnam Marines 1965–73
9781782000532	9781846037368	46	US Army Air Force (1)
9781780966410	9781780966830	48	Nelson's Navy
9781780967769	9781780968339	55	Marine Recon 1940–90
9781780967905	9781846037429	60	U-Boat Crews 1914–45
9781780967912	9781780968445	63	German Mountain & Ski Troops 1939–45
9781780966281	9781780966724	86	Japanese Naval Aviation Uniforms and Equipment
9781780966519	9781780966922	90	Heroines of the Soviet Union 1941-45
9781780966304	9781780966731	97	The Kaiser's Warlords
9781849088954	9781849085960	99	Italian Army Elite Units and Special Forces 1940–43
9781780961439	9781846038778	100	World War II Axis Booby Traps and Sabotage Tactics
9781780966526	9781780966939	111	Heroes of the Soviet Union 1941-44
9781780966489	9781780966892	113	US Navy SEALs
9781780966311	9781780966748	115	Napoleon's Imperial Headquarters (1)
9781780966328	9781780966755	116	Napoleon's Imperial Headquarters (2)
9781780960319	9781849086318	119	Apache Tactics 1830-86
9781780965437	9781780965444	158	African American Troops WWII
9781849088251	9781846037603	163	SOF Afghan
9781780965413	9781846038549	165	The British Fleet Air Arm in World War II
9781780961422	9781846038198	166	The Bay of Pigs
9781780961446	9781846037887	169	World War II Japanese Tank Tactics
9781849088268	9781846038136	170	SOF Iraq
9781780962146	9781849081160	175	World War II US Cavalry Units: Pacific Theater
9781780960838	9781849081207	176	WWII US Armored Infantry Tactics
9781780962153	9781849082716	180	US Coast Guard in World War II
9781849088824	9781849083003	182	Prussian Napoleonic Tactics

OSPREY
PUBLISHING

First published in Great Britain in 2012 by Osprey Publishing,
Midland House, West Way, Botley, Oxford, OX2 0PH, UK
44-02 23rd Street, Suite 219, Long Island City, NY 11101, USA

E-mail: info@ospreypublishing.com

OSPREY PUBLISHING IS PART OF THE OSPREY GROUP

© 2012 Osprey Publishing Ltd.

All rights reserved. Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, electrical, chemical, mechanical, optical, photocopying, recording or otherwise, without the prior written permission of the copyright owner. Enquiries should be addressed to the Publishers.

A CIP catalog record for this book is available from the British Library

Print ISBN: 978 1 84908 797 1
PDF ebook ISBN: 978 1 84908 798 8
ePub ebook ISBN: 978 1 78096 874 2

Editor: Martin Windrow
Page layout: Ken Vail Graphic Design, Cambridge, UK (kvgd.com)
Index by Alison Worthington
Typeset in Sabon and Myriad Pro
Originated by PDQ Media, Bungay, UK
Printed in China through Worldprint Ltd.

12 13 14 15 16 17 10 9 8 7 6 5 4 3 2 1

Osprey Publishing is supporting the Woodland Trust, the UK's leading woodland conservation charity, by funding the dedication of trees.

www.ospreypublishing.com

© Osprey Publishing. Access to this book is not digitally restricted. In return, we ask you that you use it for personal, non-commercial purposes only. Please don't upload this ebook to a peer-to-peer site, email it to everyone you know, or resell it. Osprey Publishing reserves all rights to its digital content and no part of these products may be copied, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, recording or otherwise (except as permitted here), without the written permission of the publisher. Please support our continuing book publishing programme by using this e-book responsibly.

Every effort has been made by the Publisher to secure permissions to use the images in this publication. If there has been any oversight we would be happy to rectify the situation and written submission should be made to Osprey Publishing.

ACKNOWLEDGMENTS

The author is indebted to Donald Boose (Army War College), and to Tom Laemlein of Armor Plate Press for his photographic support.

ARTIST'S NOTE

Readers may care to note that the original paintings from which the color plates in this book were prepared are available for private sale. All reproduction copyright whatsoever is retained by the Publishers. All enquiries should be addressed to:

Peter Dennis, Fieldhead, The Park, Mansfield, Nottinghamshire NG18 2AT, UK

The Publishers regret that they can enter into no correspondence upon this matter.

Abbreviations

AFV	armored fighting vehicle
AP	antipersonnel
Armd	Armored
AT	antitank
Bn	Battalion
Cav	Cavalry
CO	commanding officer
Co	Company
CP	Command Post
Div	Division
Engr	Engineer
FA	Field Artillery
Grp	Group
HQ	Headquarters
HHT	Headquarters and Headquarters Troop (in cav group)
HHST	Headquarters and Headquarters and Service Troop (in cav sqdn)
HMC	howitzer motor carriage (M8 SP howitzer)
Inf	Infantry
Mech	Mechanized
Recon	Reconnaissance
Regt	Regiment
SP	self-propelled
Sqdn	Squadron (battalion-sized unit)
TD	Tank Destroyer
T/O&E	table of organization and equipment
Trp	Troop (company-sized unit)
WP	white phosphorous (screening and casualty-producing smoke)

Cavalry reconnaissance squadrons (mechanized) are abbreviated for brevity as e.g., 43rd Cav Recon Sqdn (Mech), or simply 43rd Cav Sqdn. Cavalry groups (mechanized) are abbreviated as e.g., 3rd Cav Grp (Mech); again, "(Mech)" will often be deleted for brevity.

Linear measurements

Distances, ranges, and dimensions are given in the contemporary US system of feet, yards, and statute miles rather than metric. To covert these figures to metric the following conversion formulas are provided:

feet to meters	multiply feet by 0.3058
yards to meters	multiply yards by 0.9114
miles to kilometers	multiply miles by 1.6093